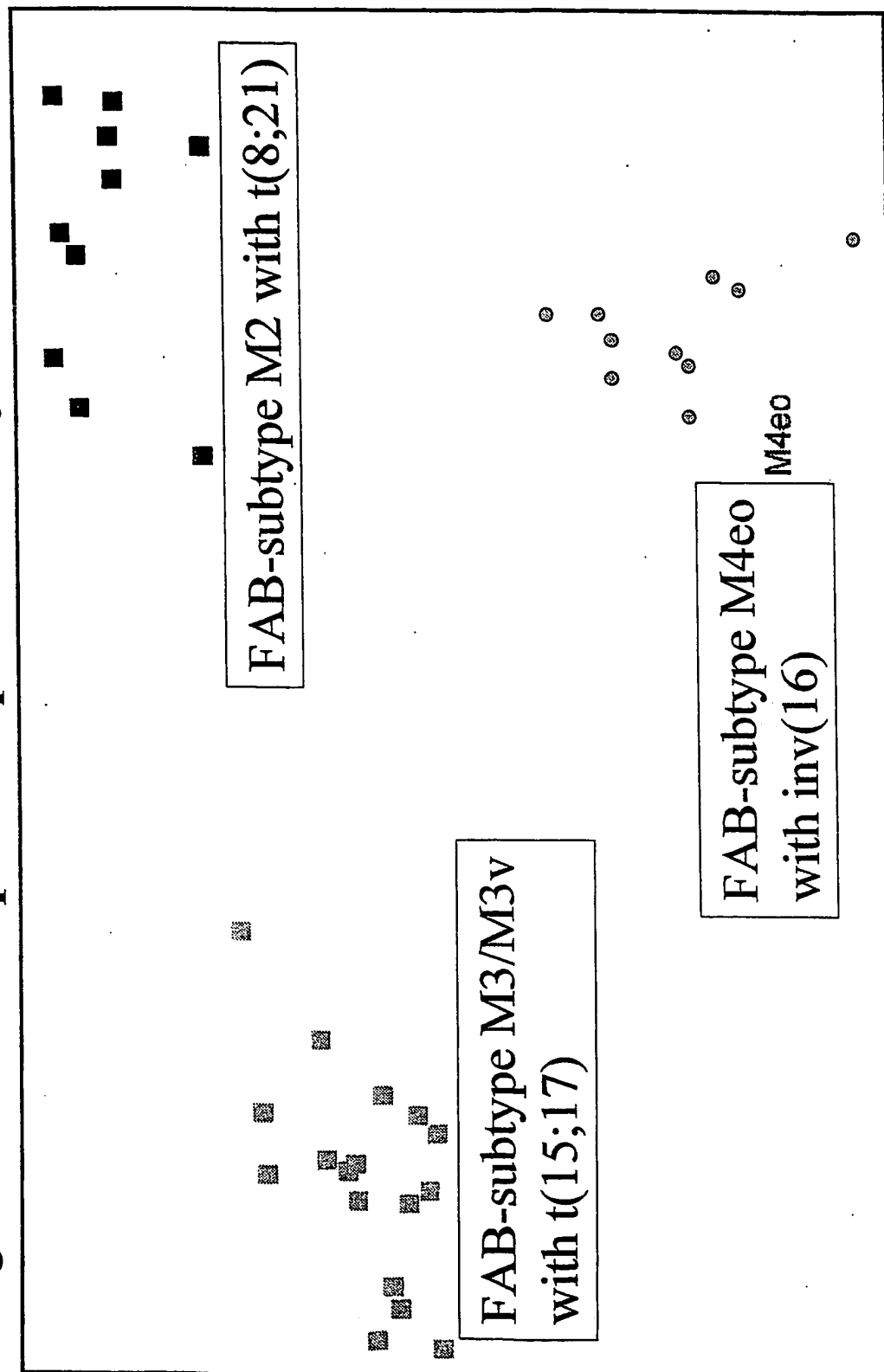


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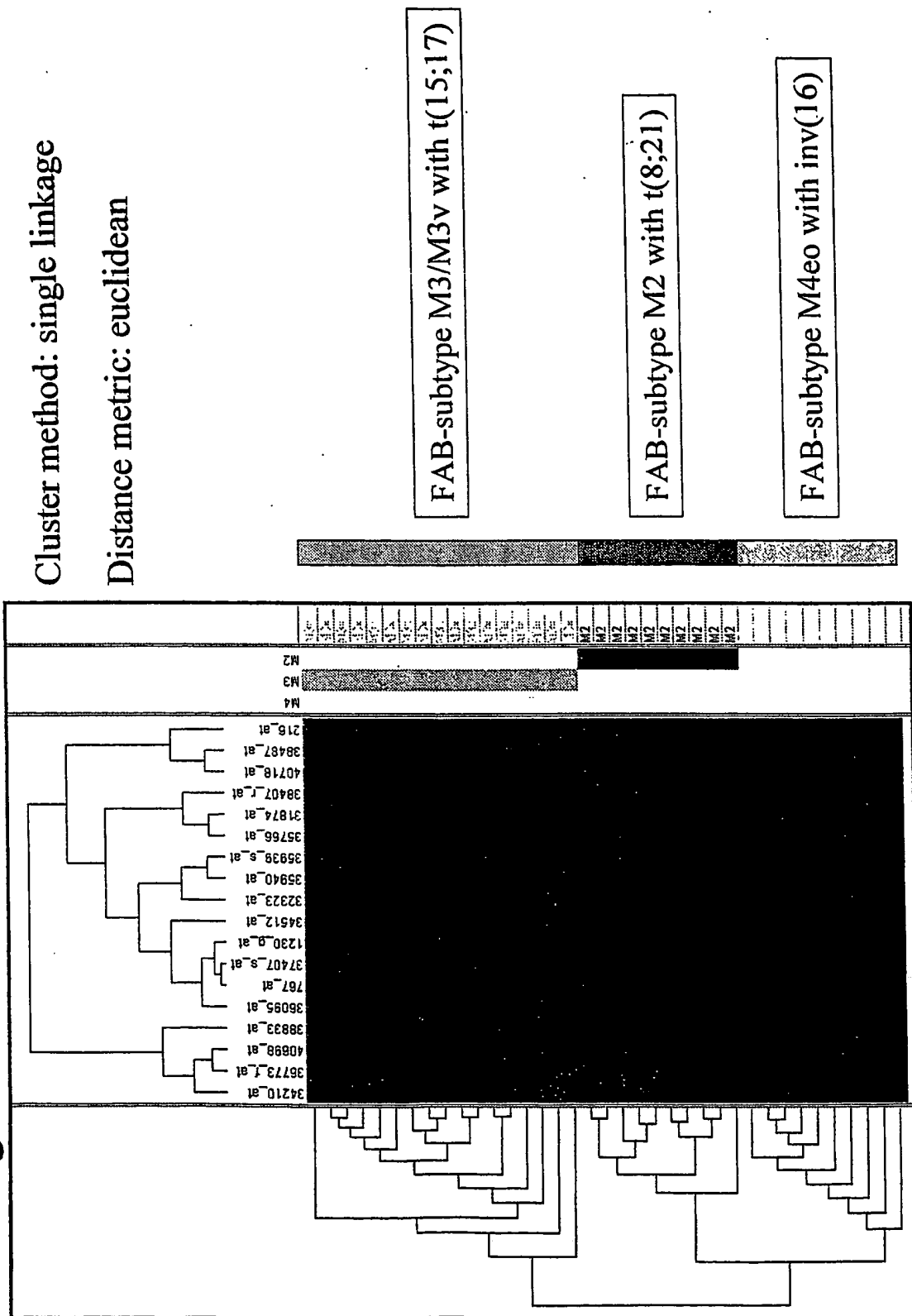
**Figure 1a Principal Component Analysis**

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**Figure 1b Hierarchical Cluster Analysis**

Cluster method: single linkage

Distance metric: euclidean



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Figure 2 Classification Accuracy

accuracy	$t(15;17) - t(8;21)$	$t(15;17) - inv(16)$	$inv(16) - t(8;21)$	$t(8;21) - R$	$t(15;17) - R$	$inv(16) - R$
U78556						1.00
M98539					1.00	
Y07846				1.00		
M63582				1.00		
N90866		1.00				
J03853			1.00			
M26326	1.00			1.00		
L20433			1.00			
X64624	1.00		1.00			1.00
N99340			1.00			
M81141	1.00				1.00	
AF013570			1.00			1.00
AI207842		1.00			1.00	
D87433	1.00			1.00		
X00457	1.00					
X96719		1.00			1.00	
AF013611	1.00			1.00		
AF001548			1.00			1.00

PCA of AML data based on 312 genes (diff'tial between 3 classes)

Figure 3a

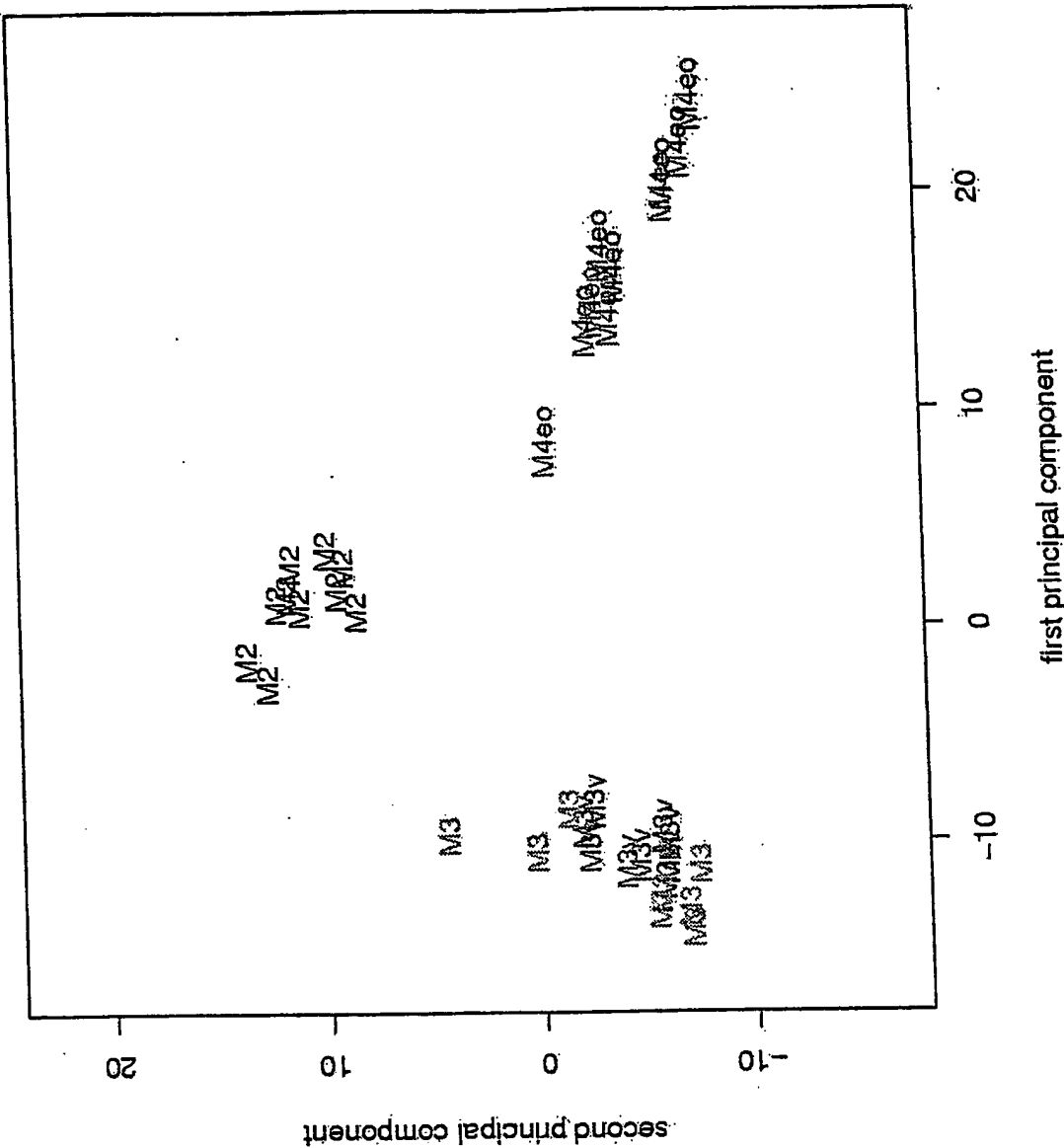




Figure 3b1

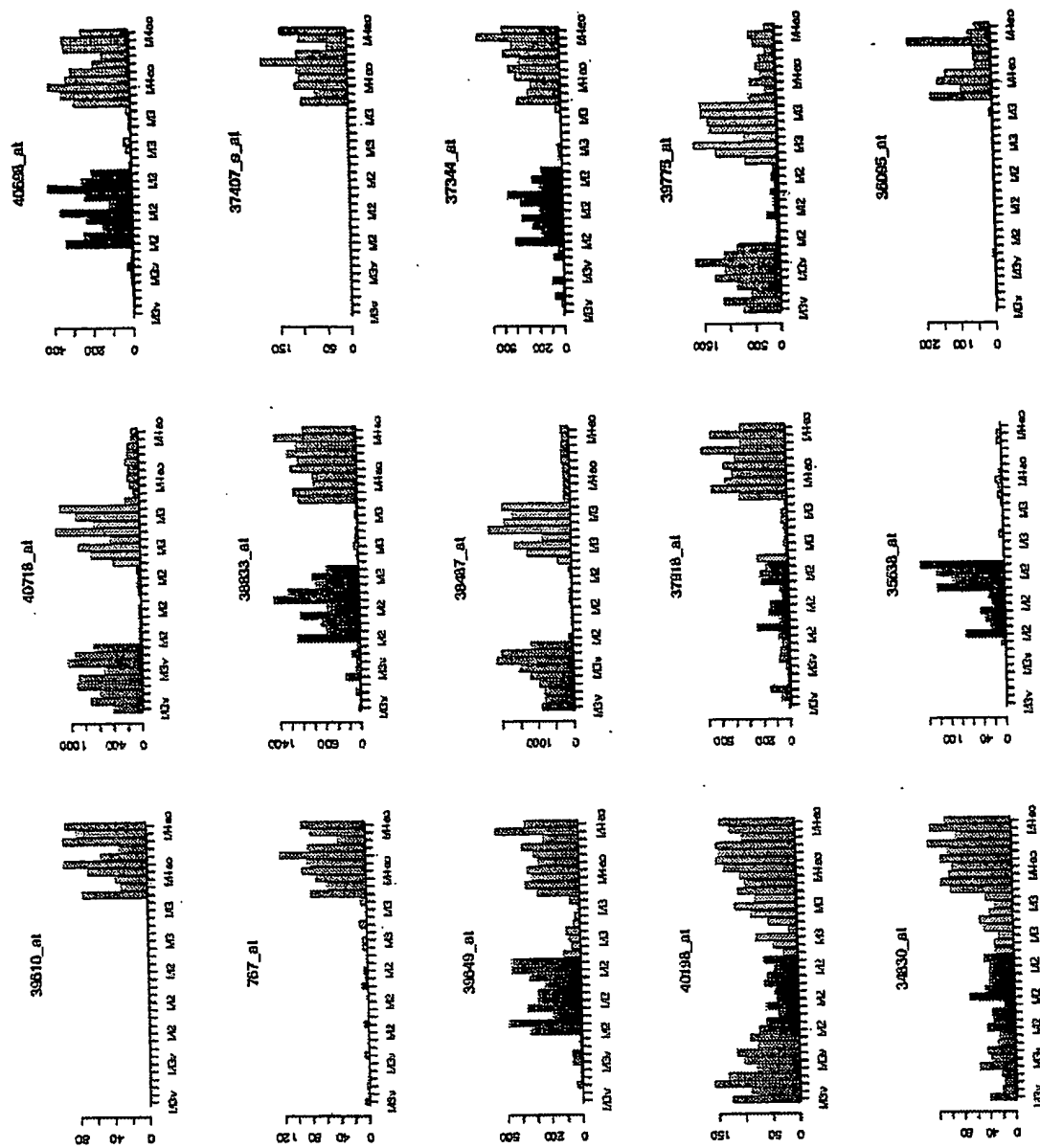
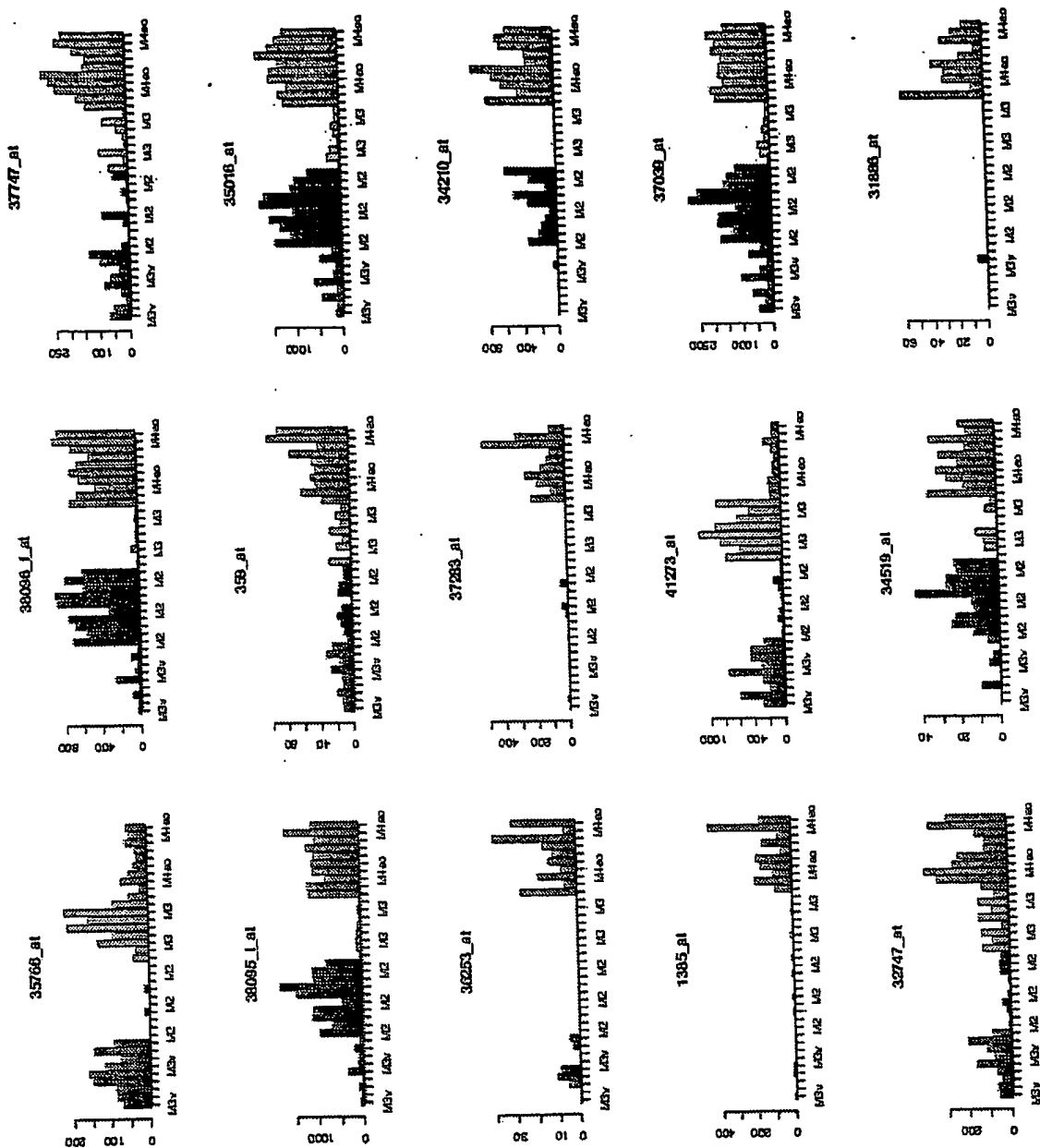


Figure 3b2



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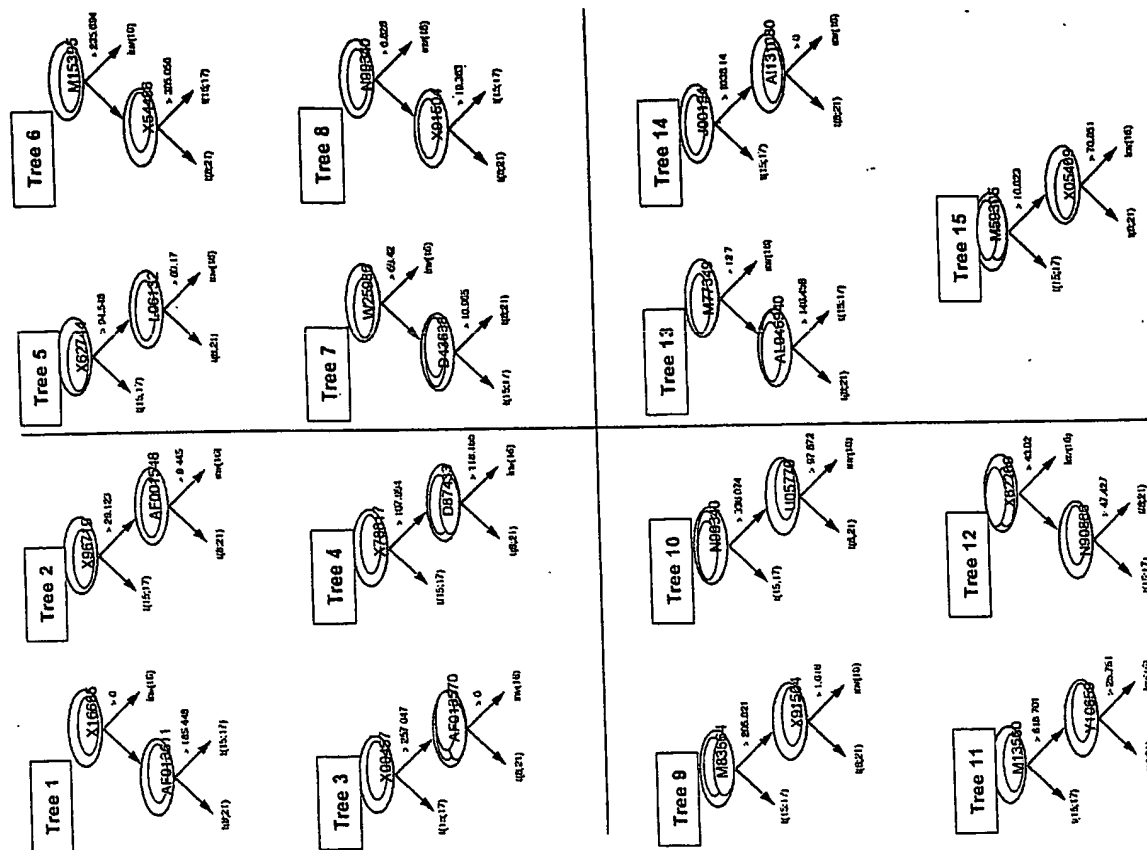
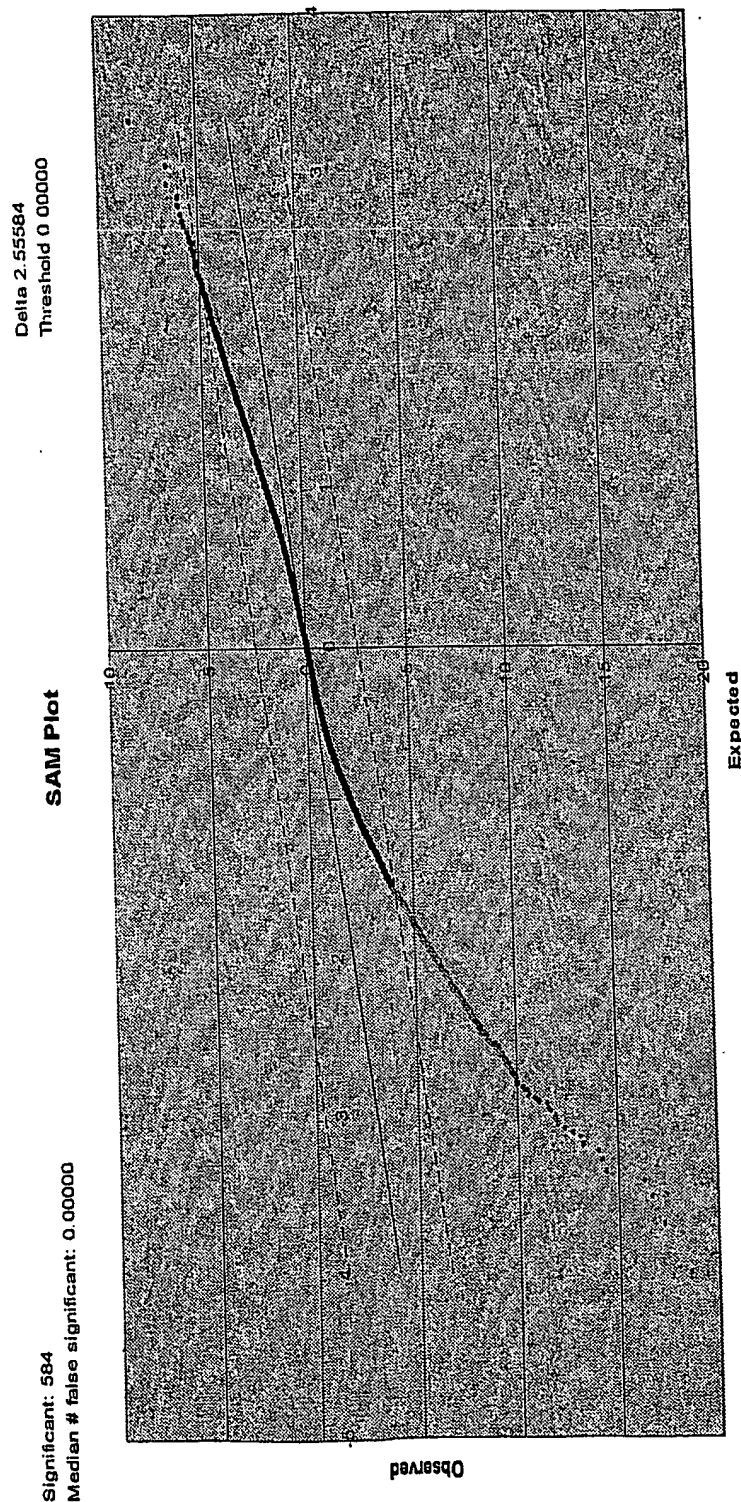


Figure 4

Decision trees according to IE

## 5a) Pairwise Comparison of Normal BM and AML

Significance Analysis of Microarrays:  
Selection of 127 differentially expressed genes based on a permutation test (K-Nearest Neighbour Imputer)

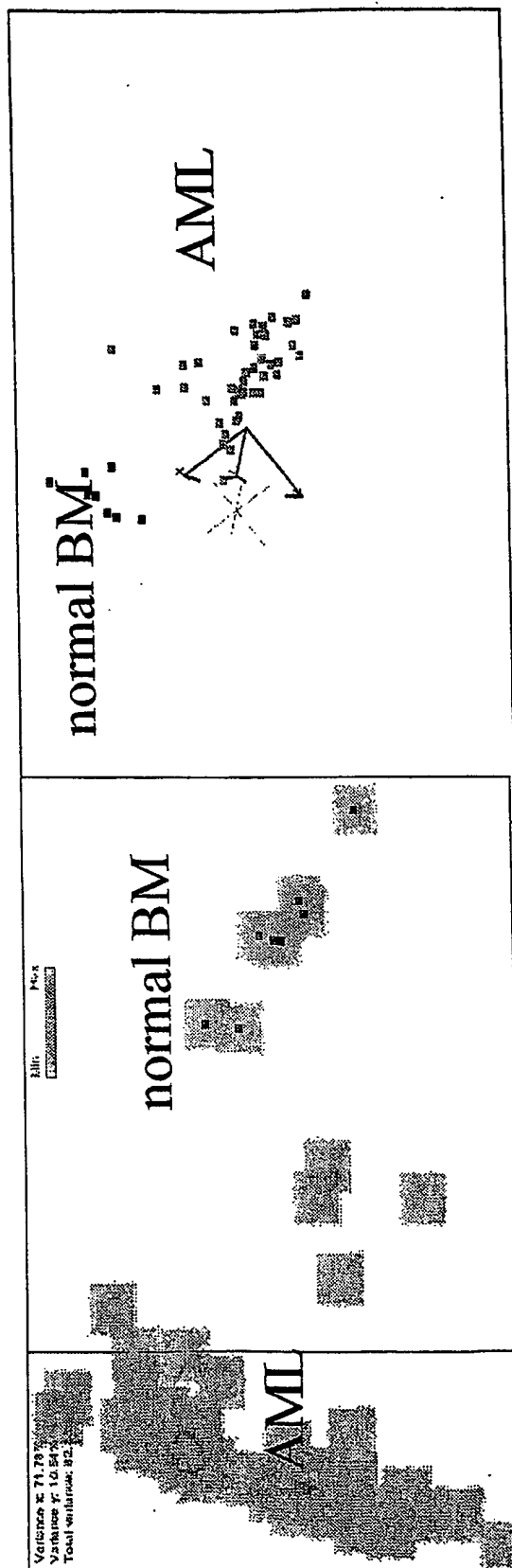


## 5b) Principal Component Analysis

based on 127 significantly differentially expressed genes as selected by SAM = Significance Analysis of Microarrays

*2-dimensional*

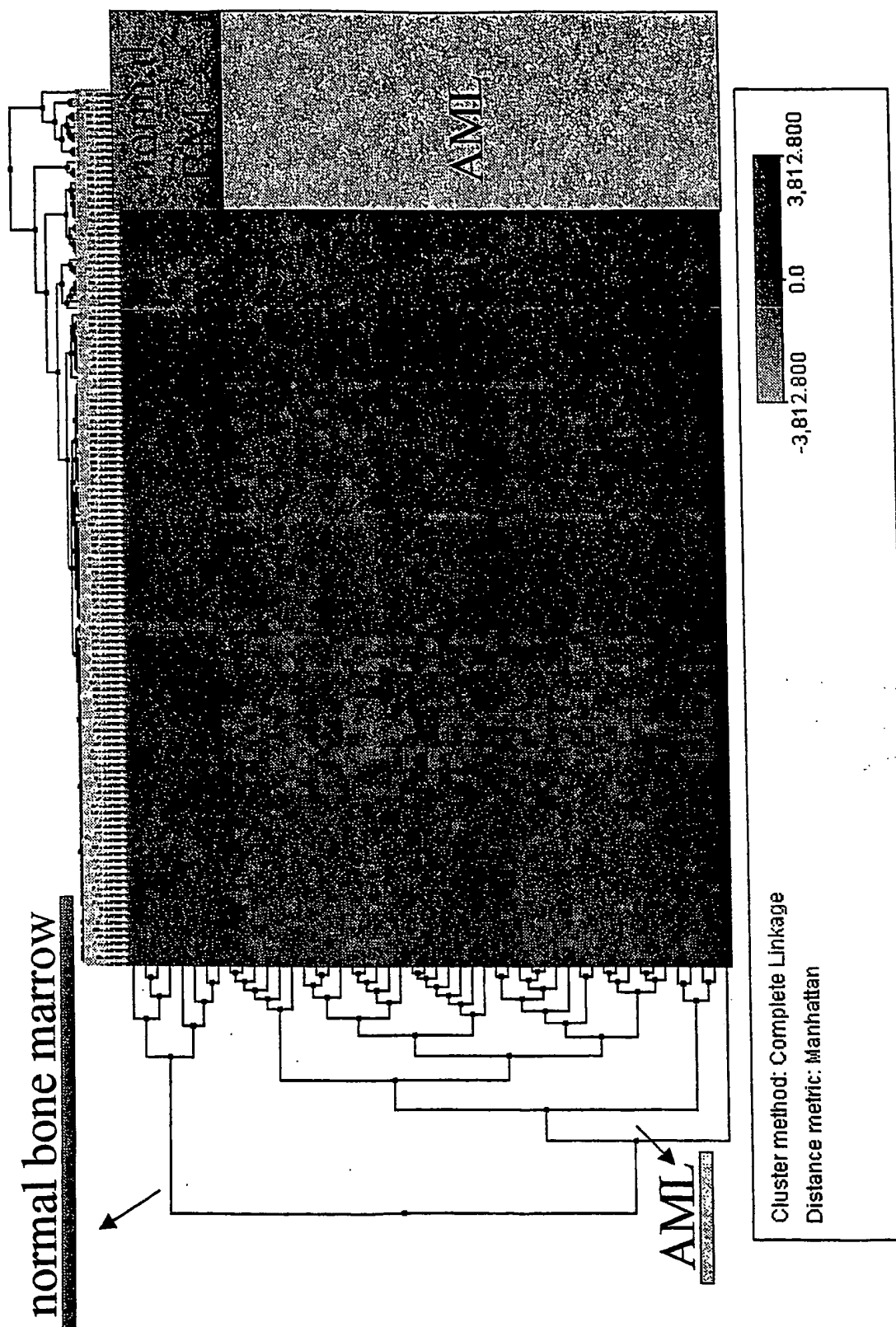
*3-dimensional*



AML = acute myeloid leukemia, n = 48  
normal BM = bone marrow from healthy volunteers, n = 8

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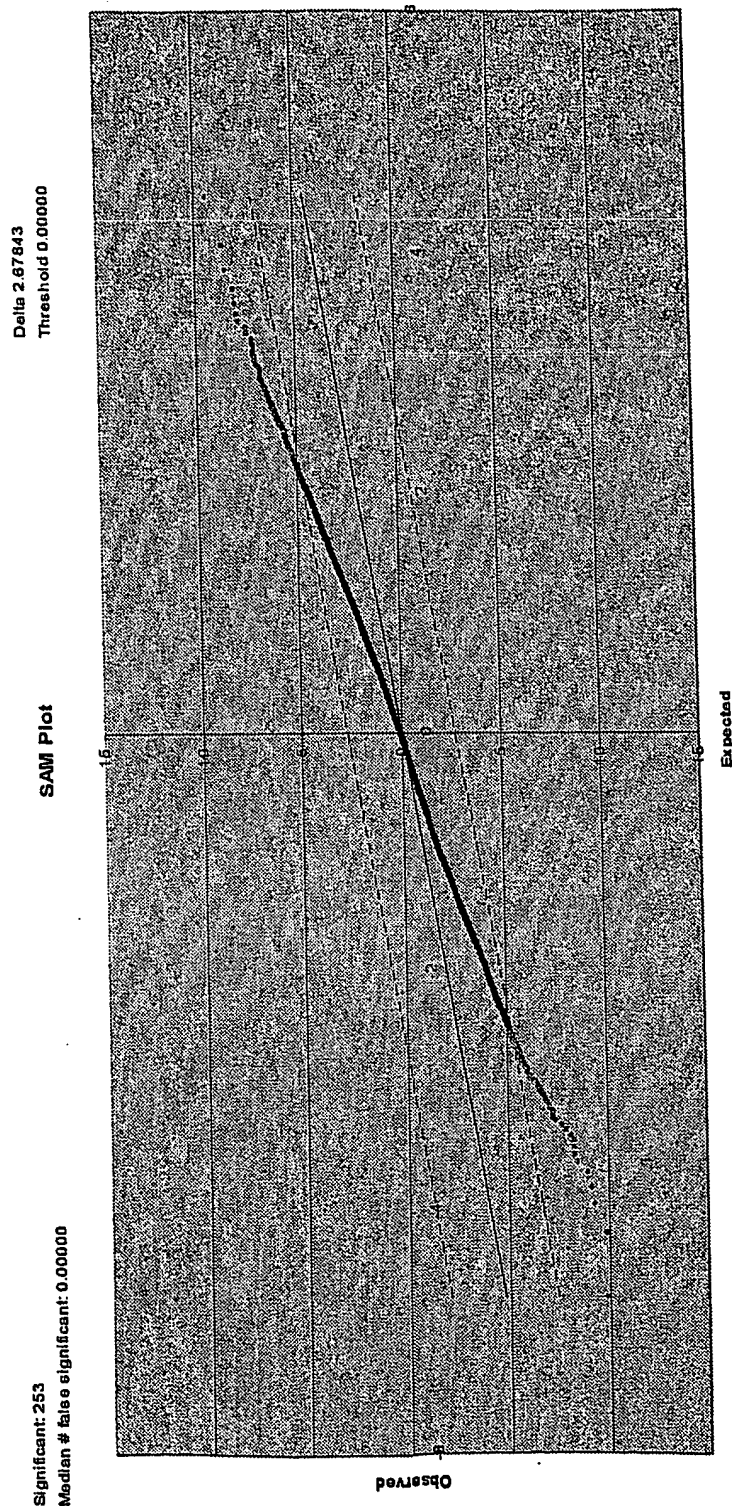
## 5c) Hierarchical Cluster Analysis



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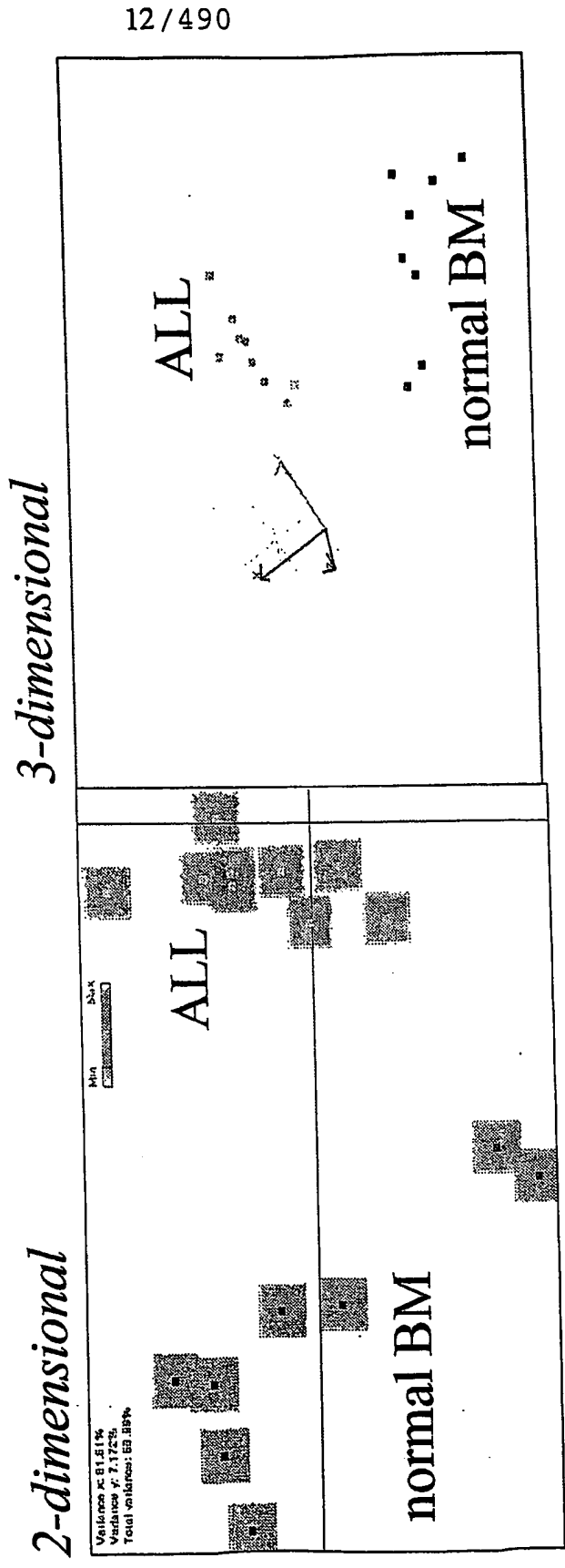
## 6a) Pairwise Comparison of Normal BM and ALL

Significance Analysis of Microarrays:  
Selection of 186 differentially expressed genes based on a permutation test (K-Nearest Neighbour Imputer)



# 6b) Principal Component Analysis

based on 186 significantly differentially expressed genes as selected by SAM = Significance Analysis of Microarrays

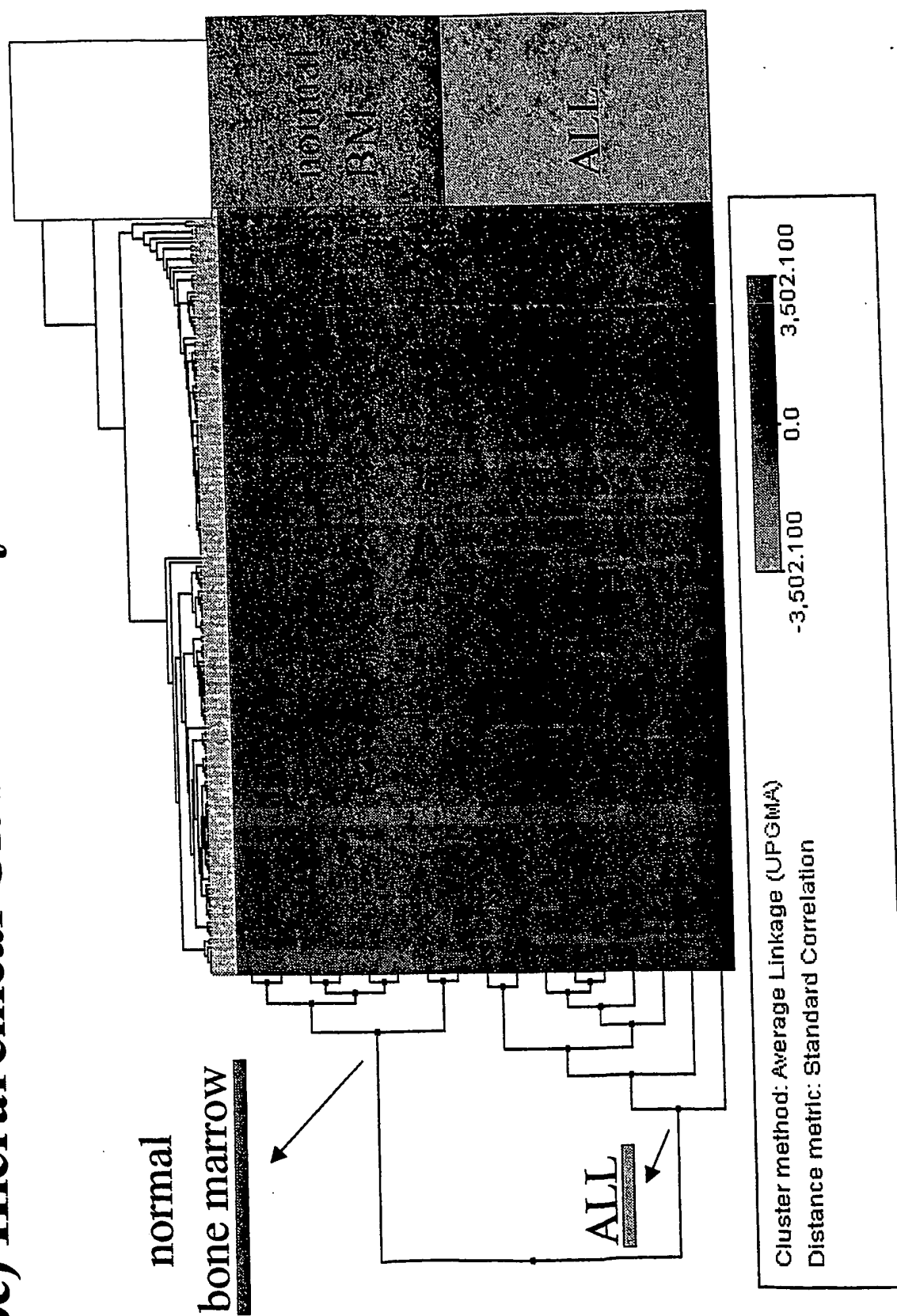


ALL = akute lymphoblastic leukemia, n = 9  
normal BM = bone marrow from healthy volunteers, n = 8



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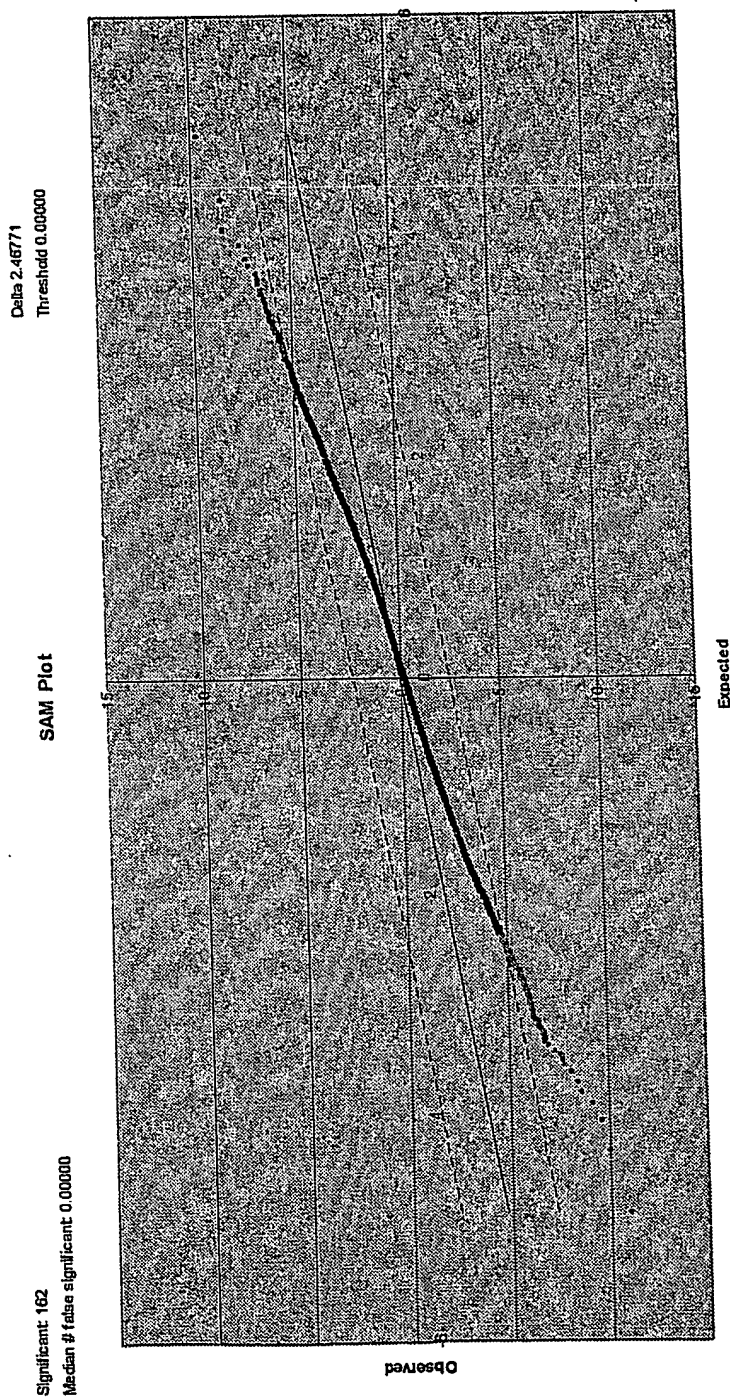
## 6c) Hierarchical Cluster Analysis



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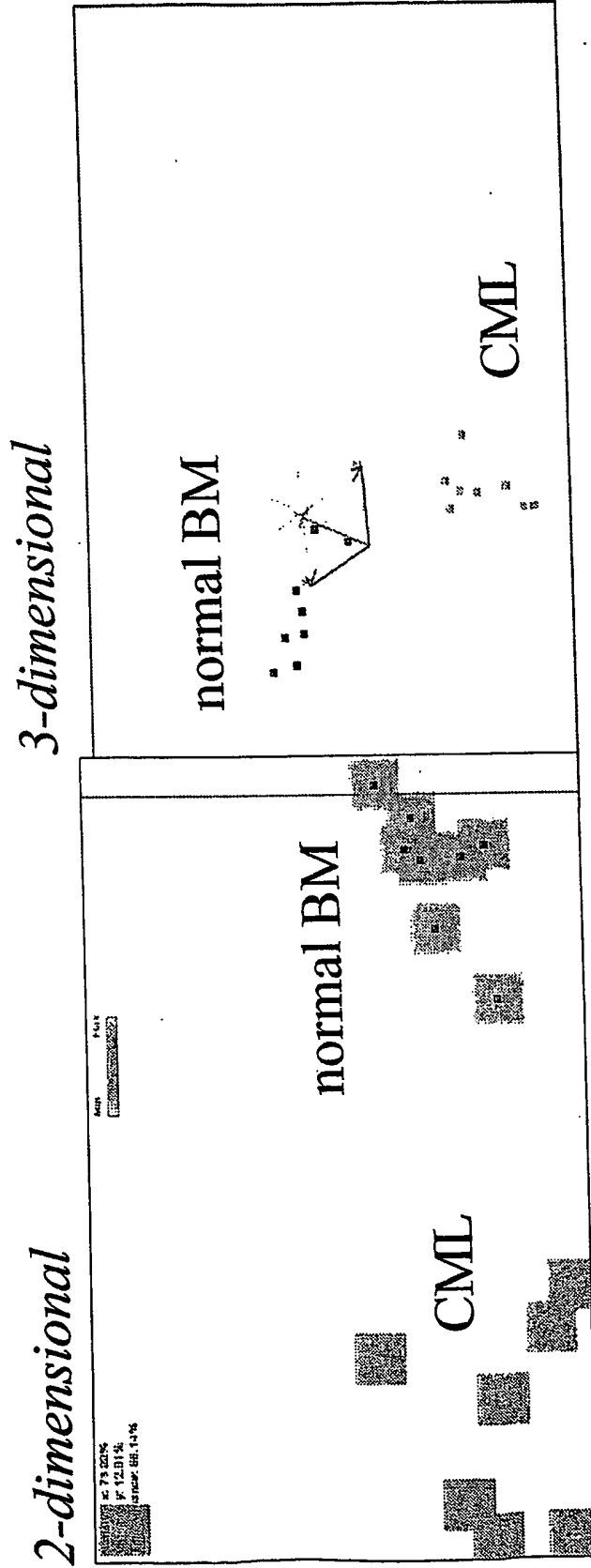
## 7a) Pairwise Comparison of Normal BM and CML

Significance Analysis of Microarrays:  
Selection of 162 differentially expressed genes based on a permutation test (K-Nearest Neighbour Imputer)



## 7b) Principal Component Analysis

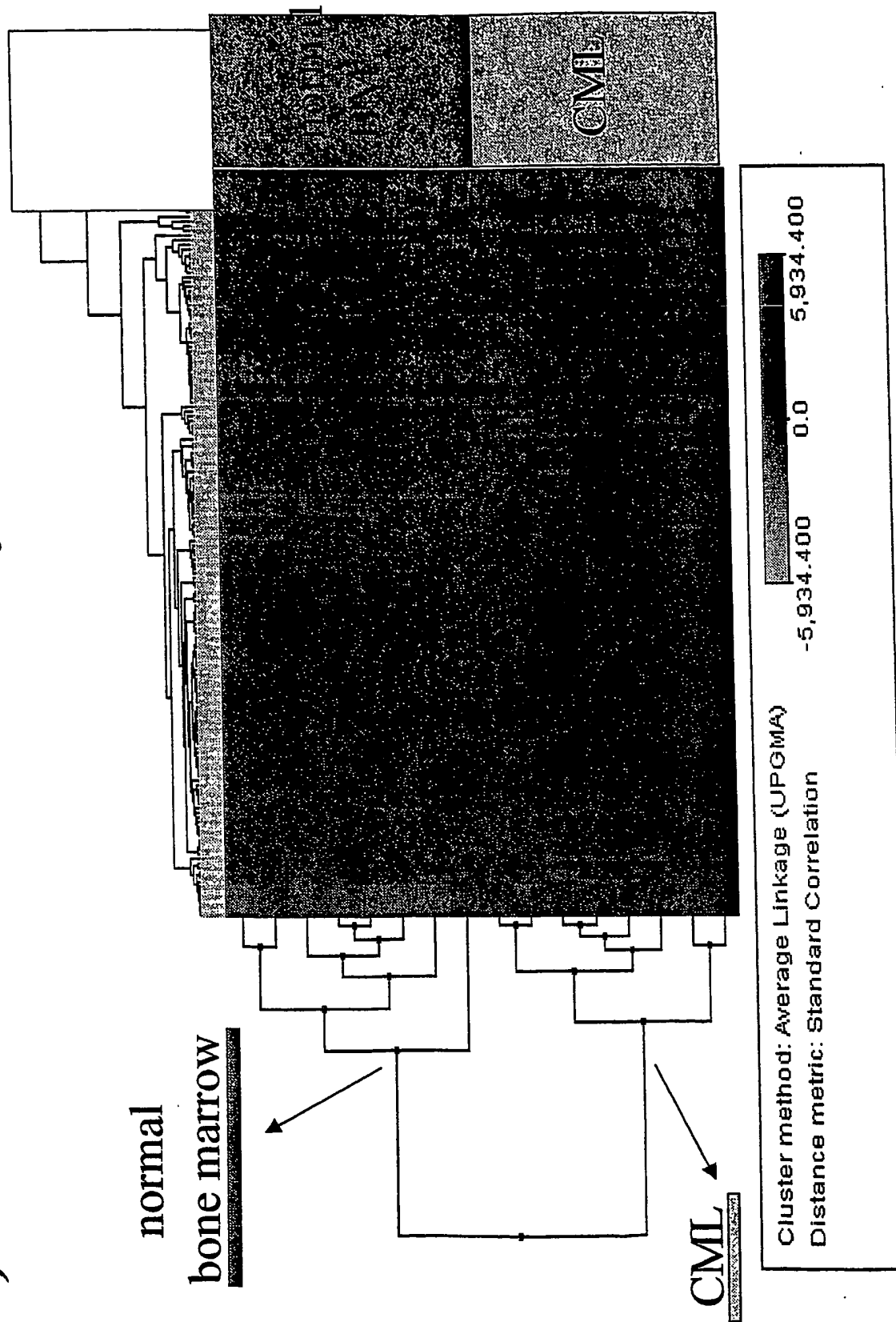
based on 200 significantly differentially expressed genes as selected by SAM = Significance Analysis of Microarrays



CML = chronic myeloid leukemia, n = 8  
normal BM = bone marrow from healthy volunteers, n = 8

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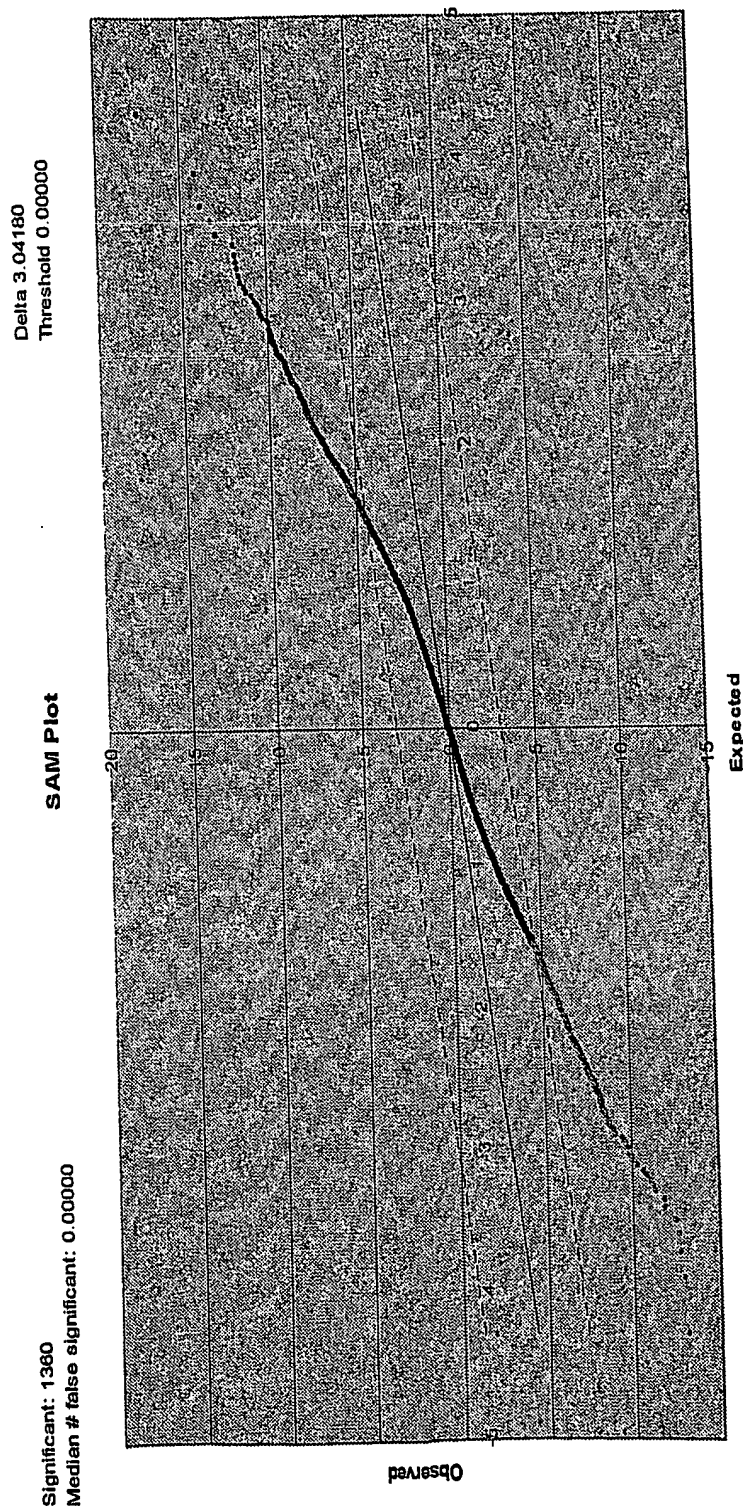
## 7c) Hierarchical Cluster Analysis



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## 8a) Pairwise Comparison of Normal BM and CLL

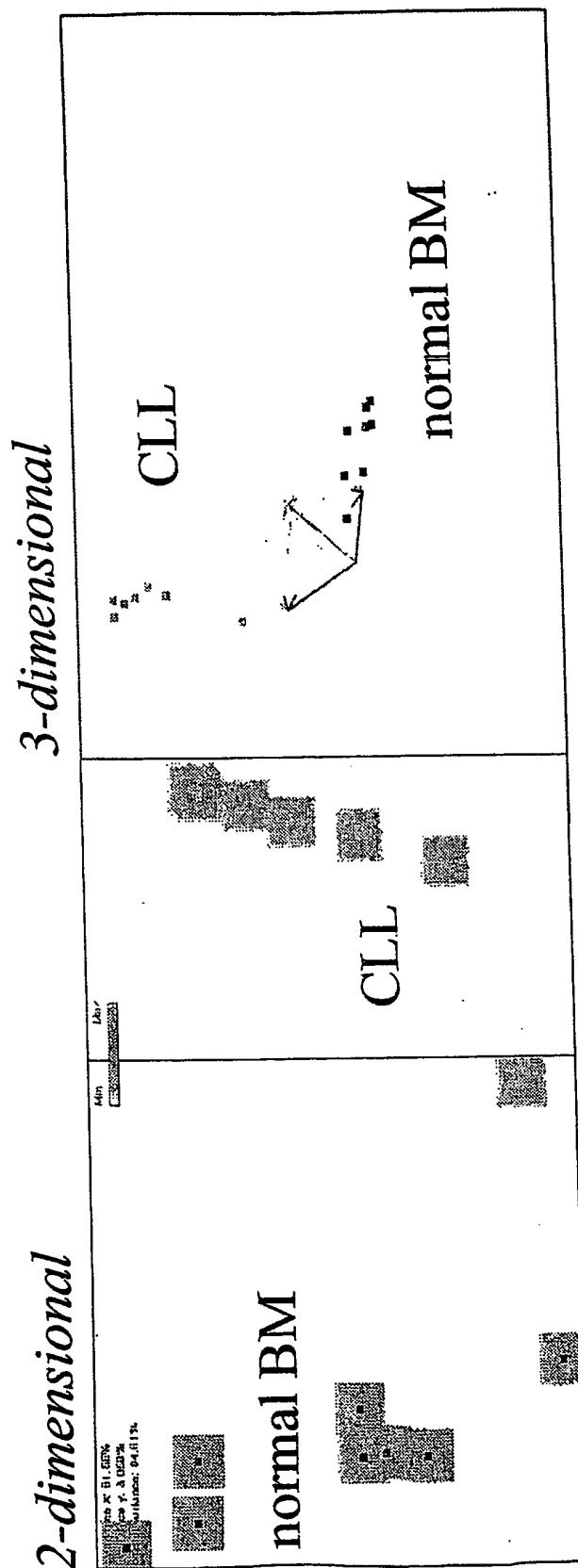
Significance Analysis of Microarrays:  
Selection of 200 differentially expressed genes based on a permutation test (K-Nearest Neighbor Imputer)



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## 8b) Principal Component Analysis

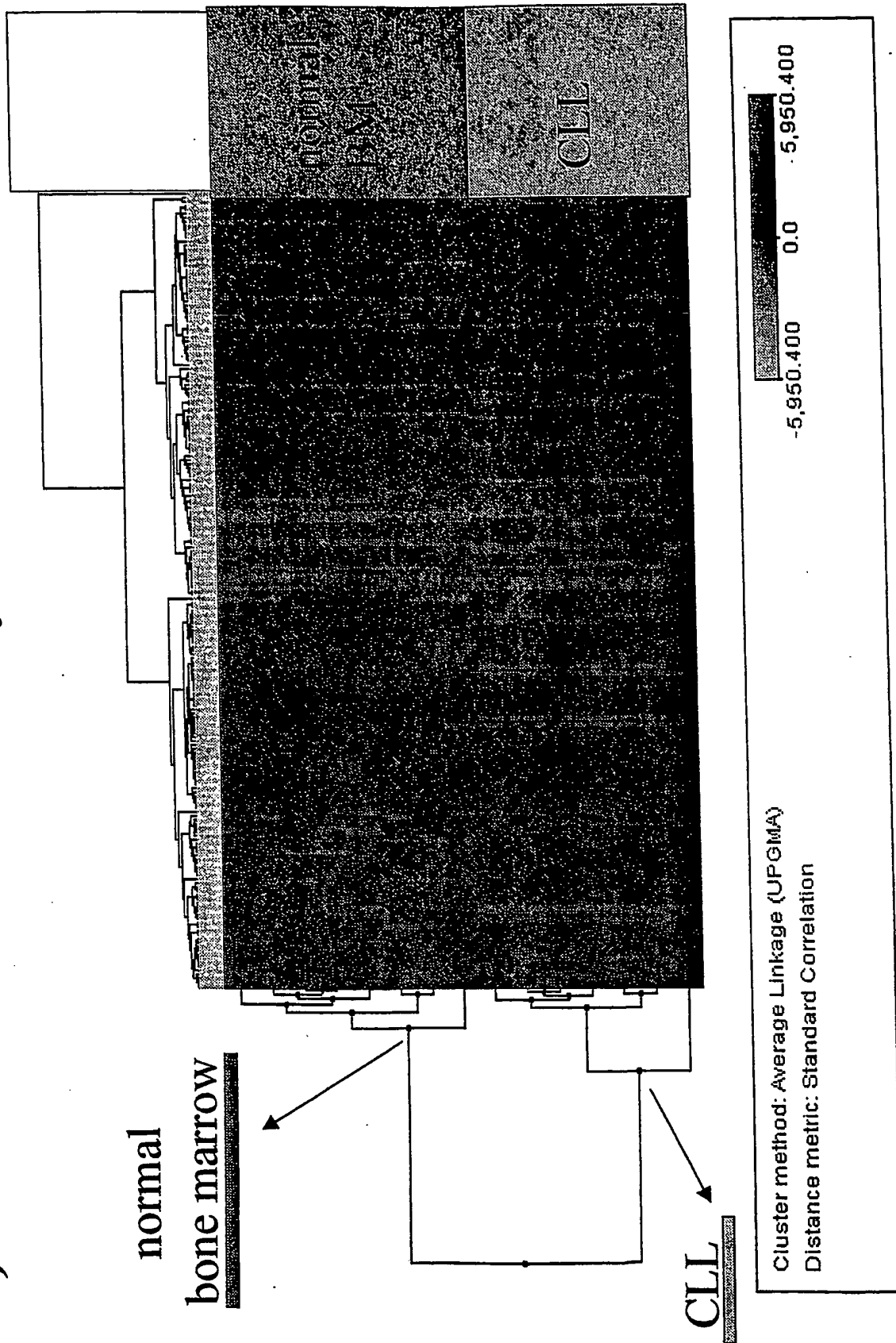
based on 200 significantly differentially expressed genes as selected by SAM = Significance Analysis of Microarrays



CLL = chronic lymphatic leukemia, n = 7  
normal BM = bone marrow from healthy volunteers, n = 8

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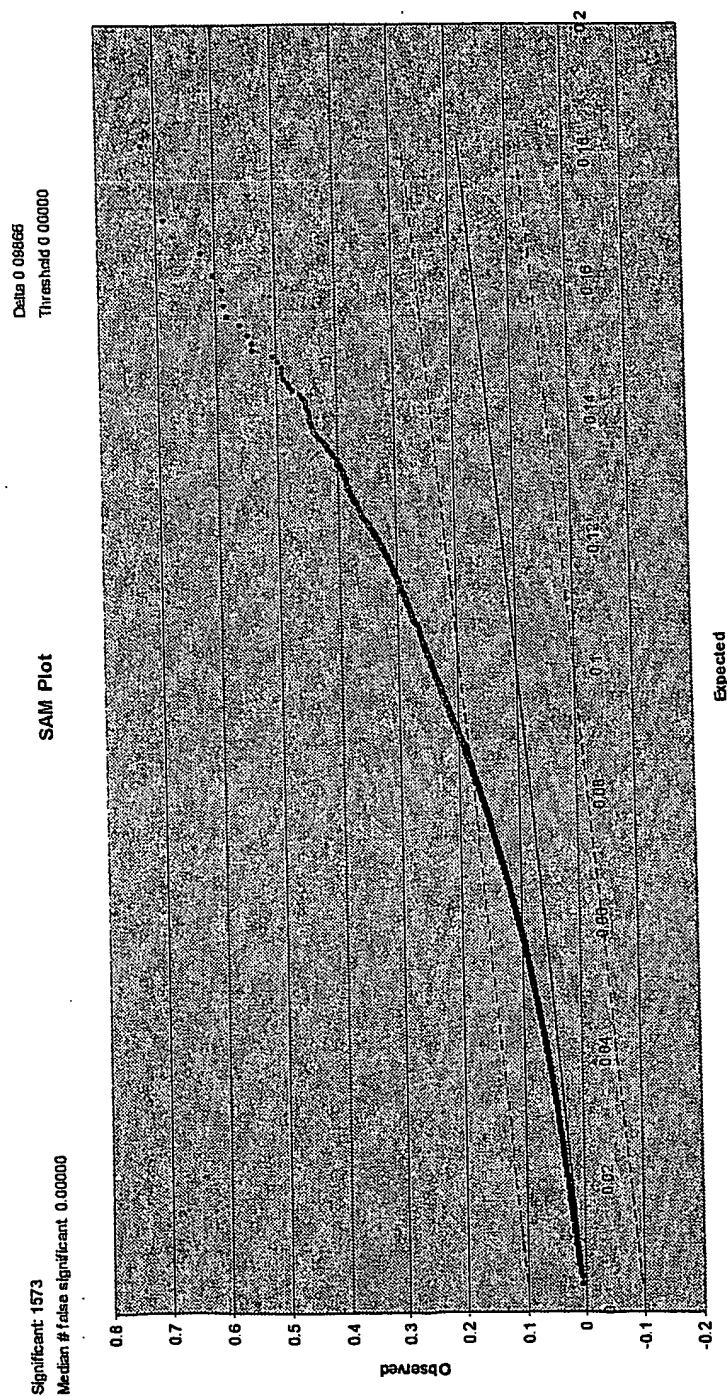
# 8c) Hierarchical Cluster Analysis



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## 9a) AML-WHO Classification

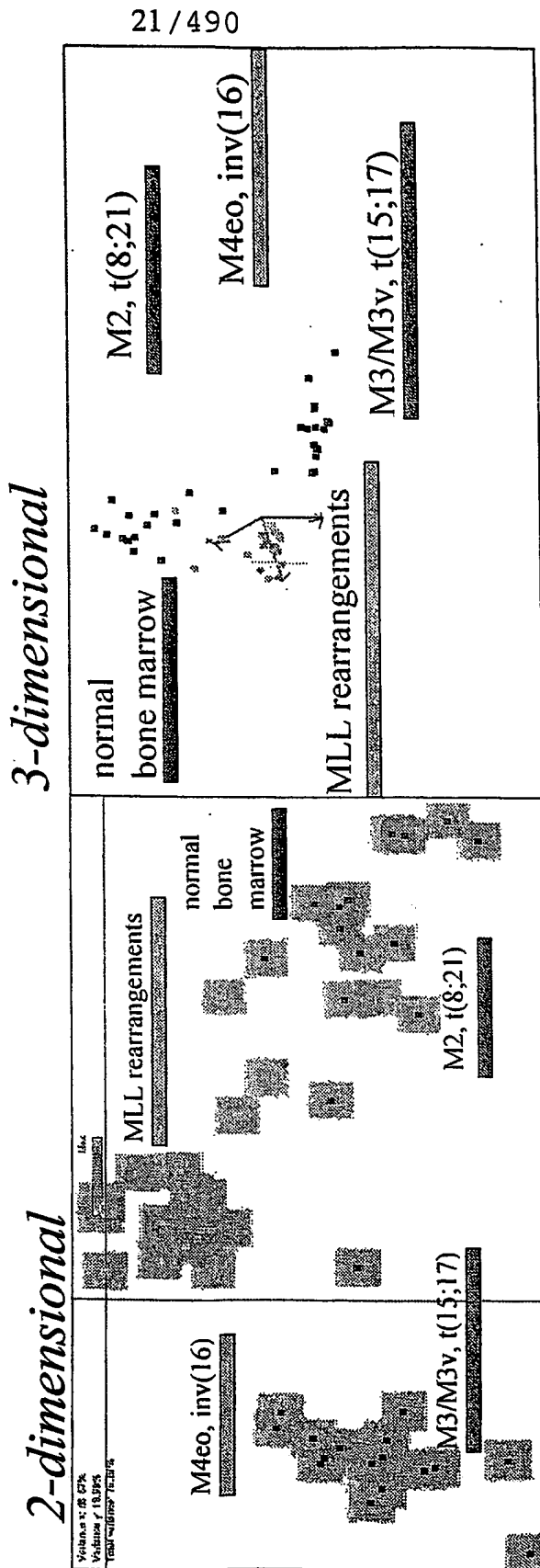
Significance Analysis of Microarrays:  
Selection of 124 differentially expressed genes based on a permutation test (K-Nearest Neighbor Imputer)





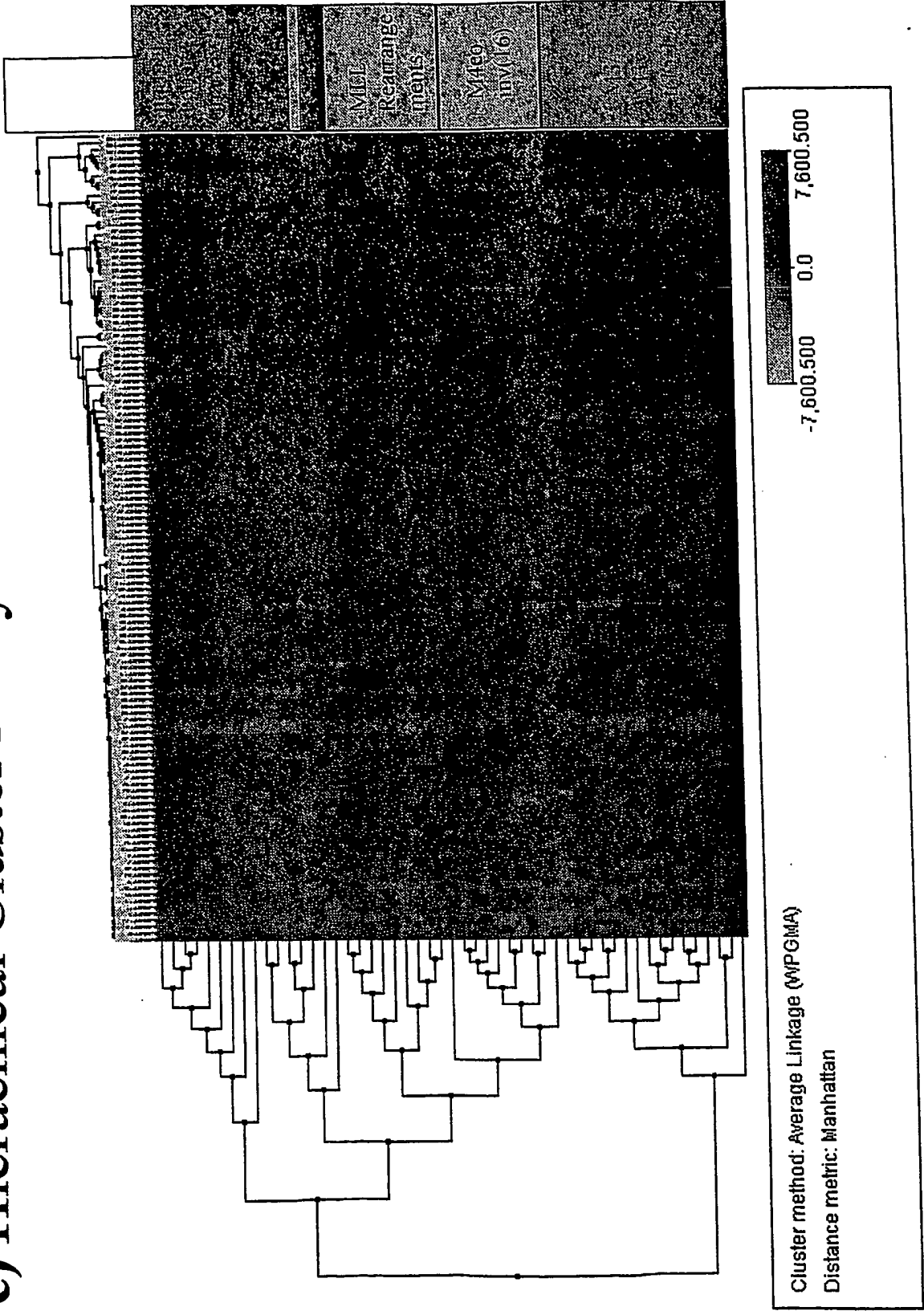
# 9b) Principal Component Analysis

based on 124 significantly differentially expressed genes as selected by SAM = Significance Analysis of Microarrays



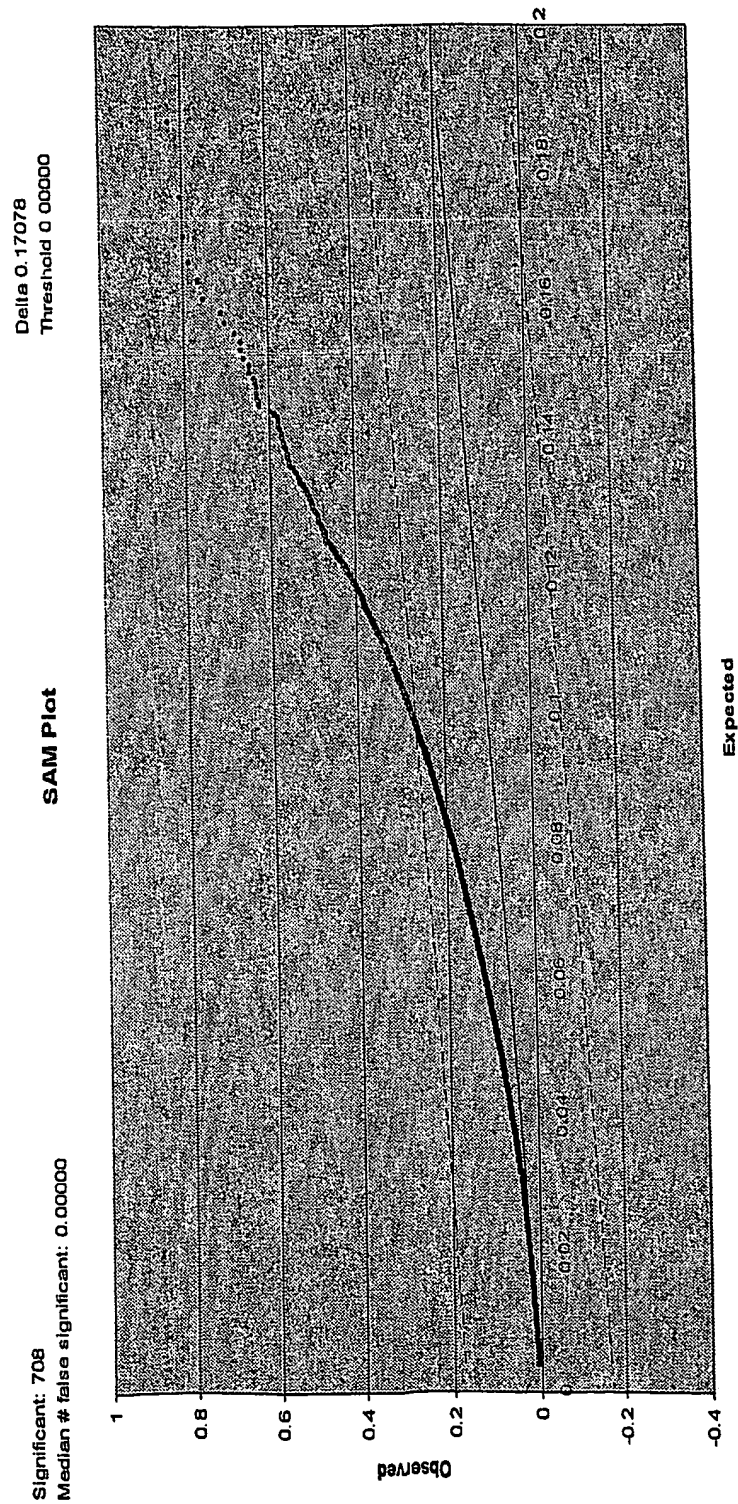
AML = 4 distinct cytogenetic subgroups, n = 48  
normal BM = bone marrow from healthy volunteers, n = 8

9c) Hierarchical Cluster Analysis



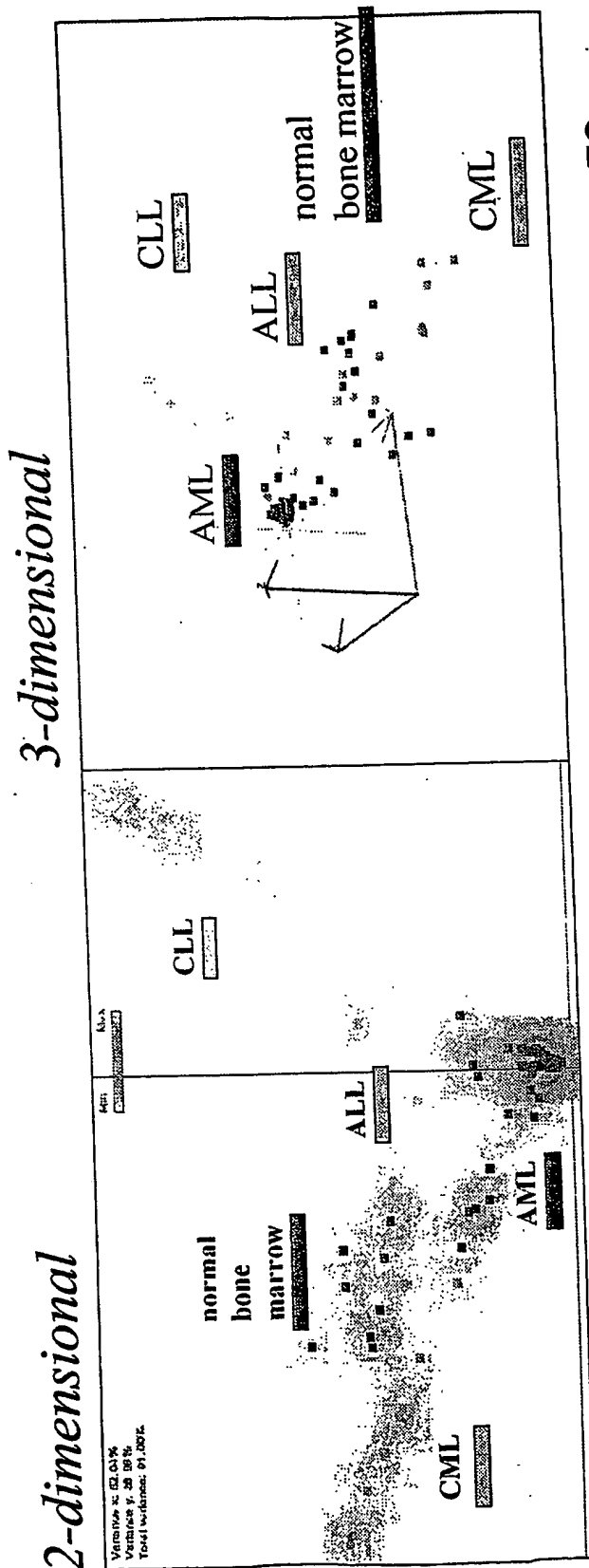
# 10a) Comparison of Normal BM versus Leukemia

Significance Analysis of Microarrays:  
Selection of Top 100 differentially expressed genes based on a permutation test (K-Nearest Neighbour Imputer)



# 10b) Principal Component Analysis

based on 100 significantly differentially expressed genes as selected by SAM = Significance Analysis of Microarrays



leukemia = 4 entities: AML, ALL, CML, CLL, n = 72  
normal BM = bone marrow from healthy volunteers, n = 8

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## 10c) Hierarchical Cluster Analysis

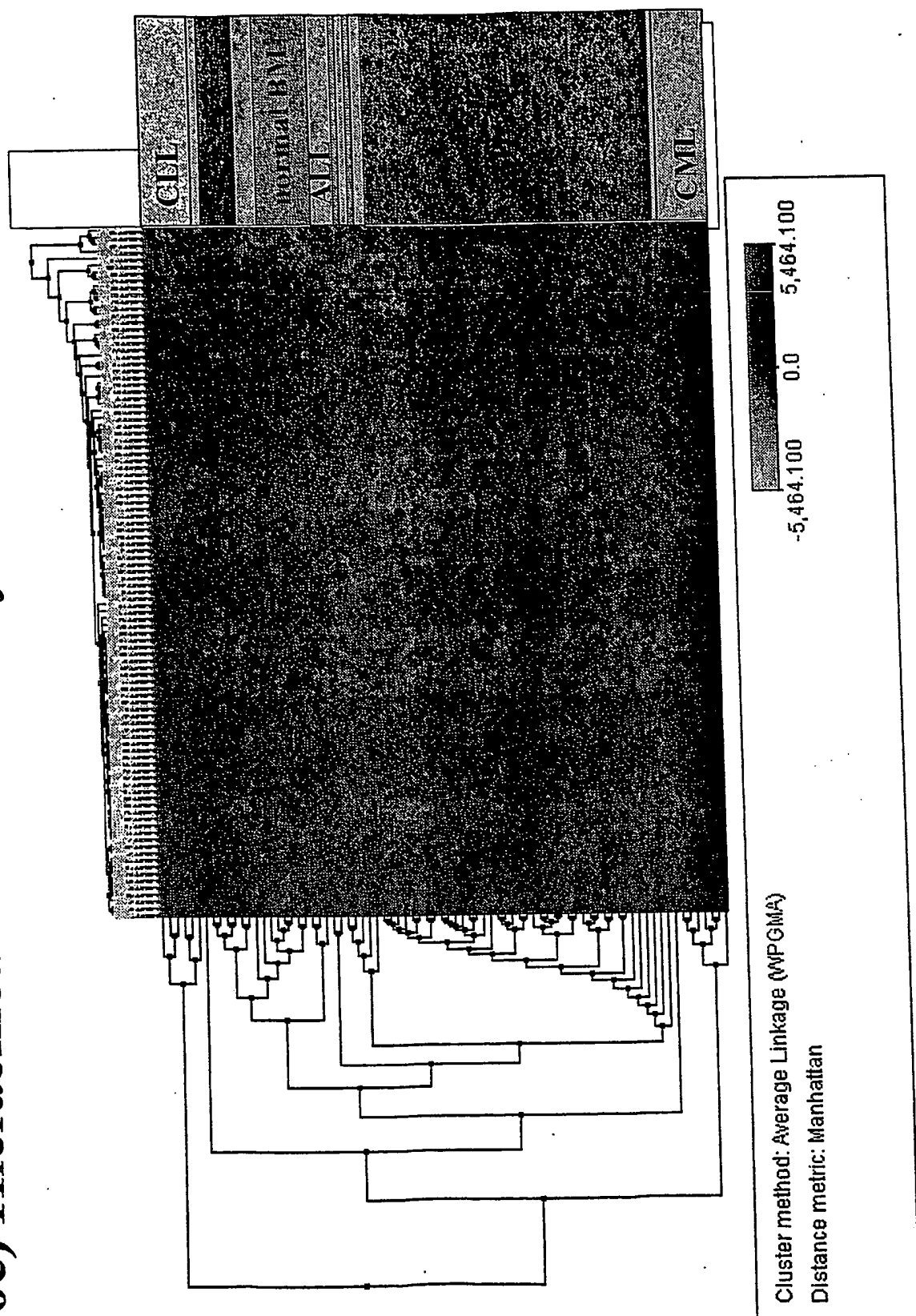
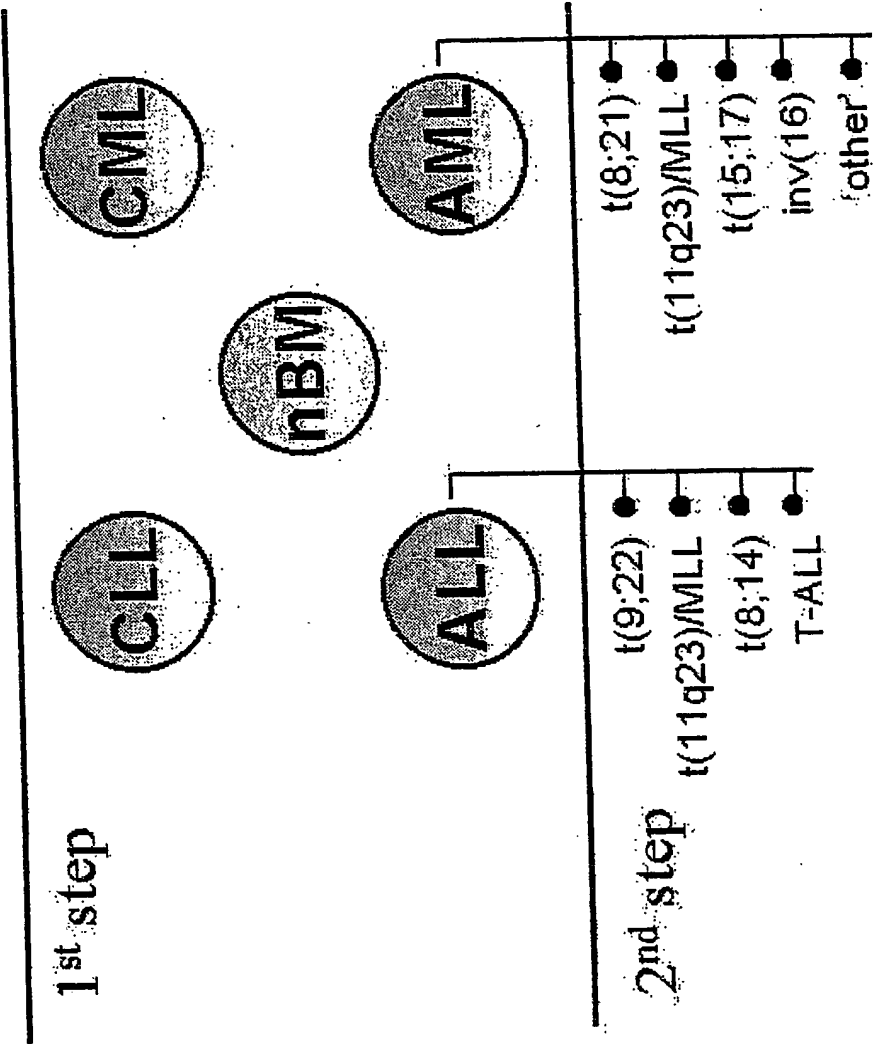


Figure 11a



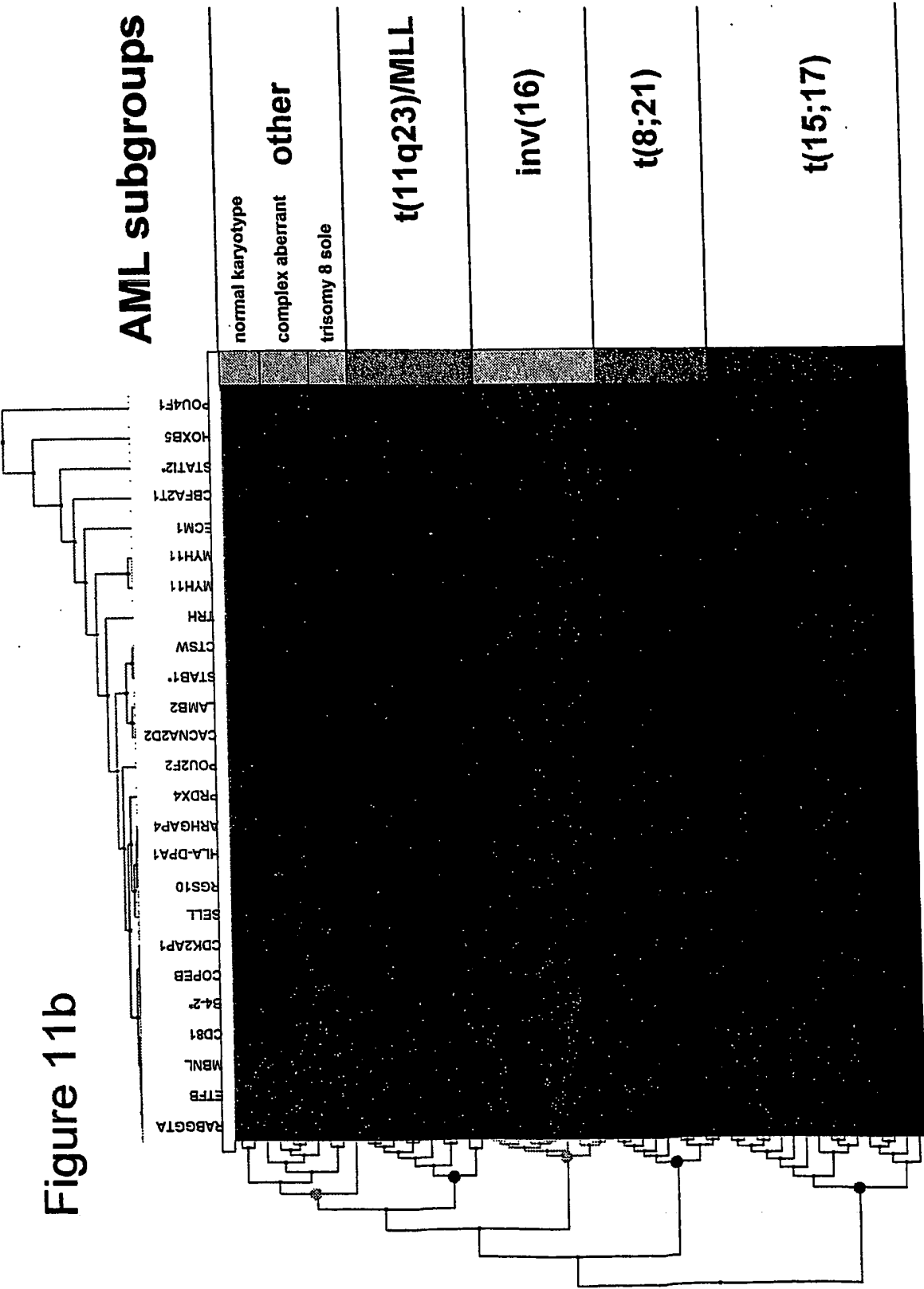
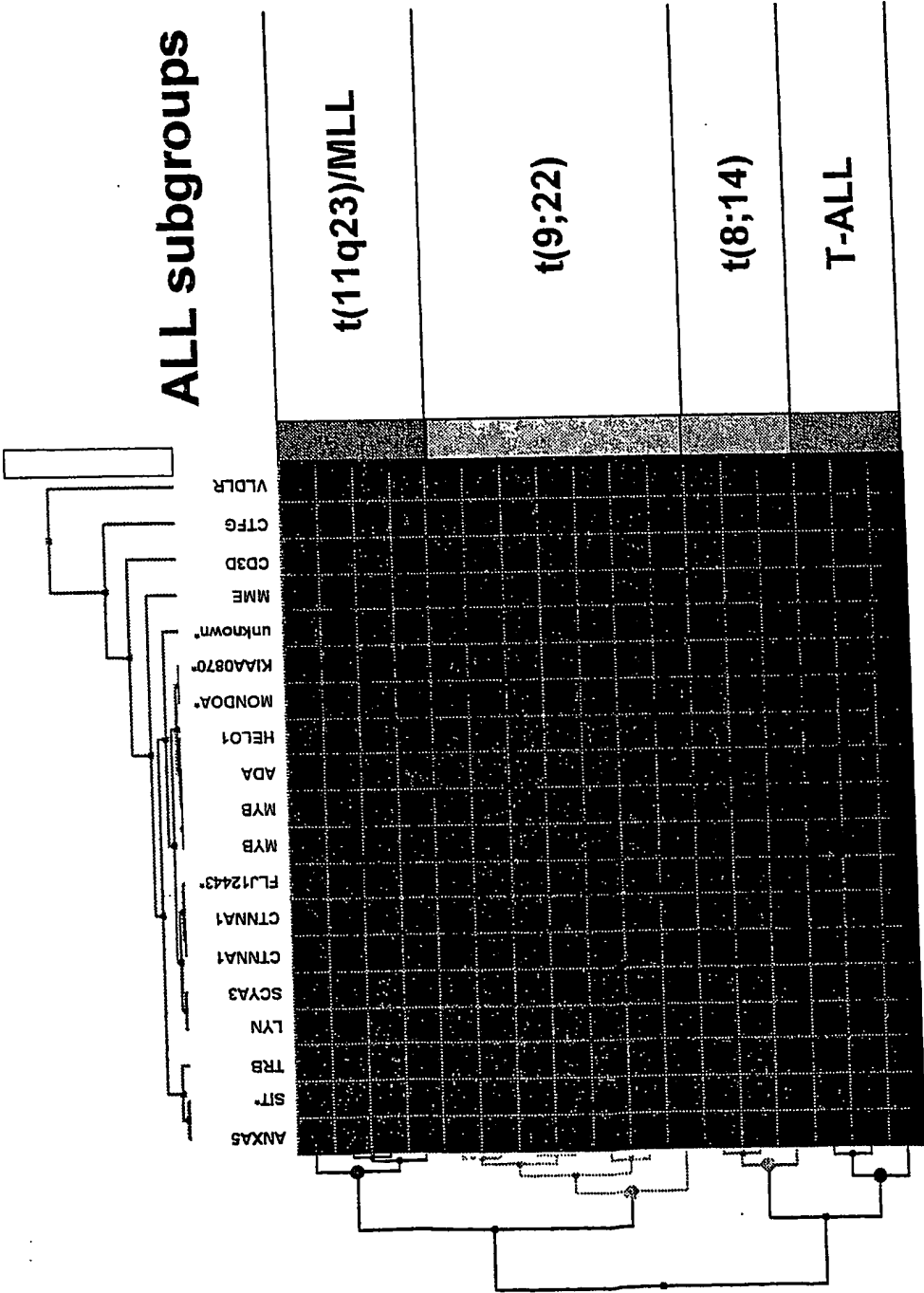


Figure 11b

Figure 11c





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Figure 12a

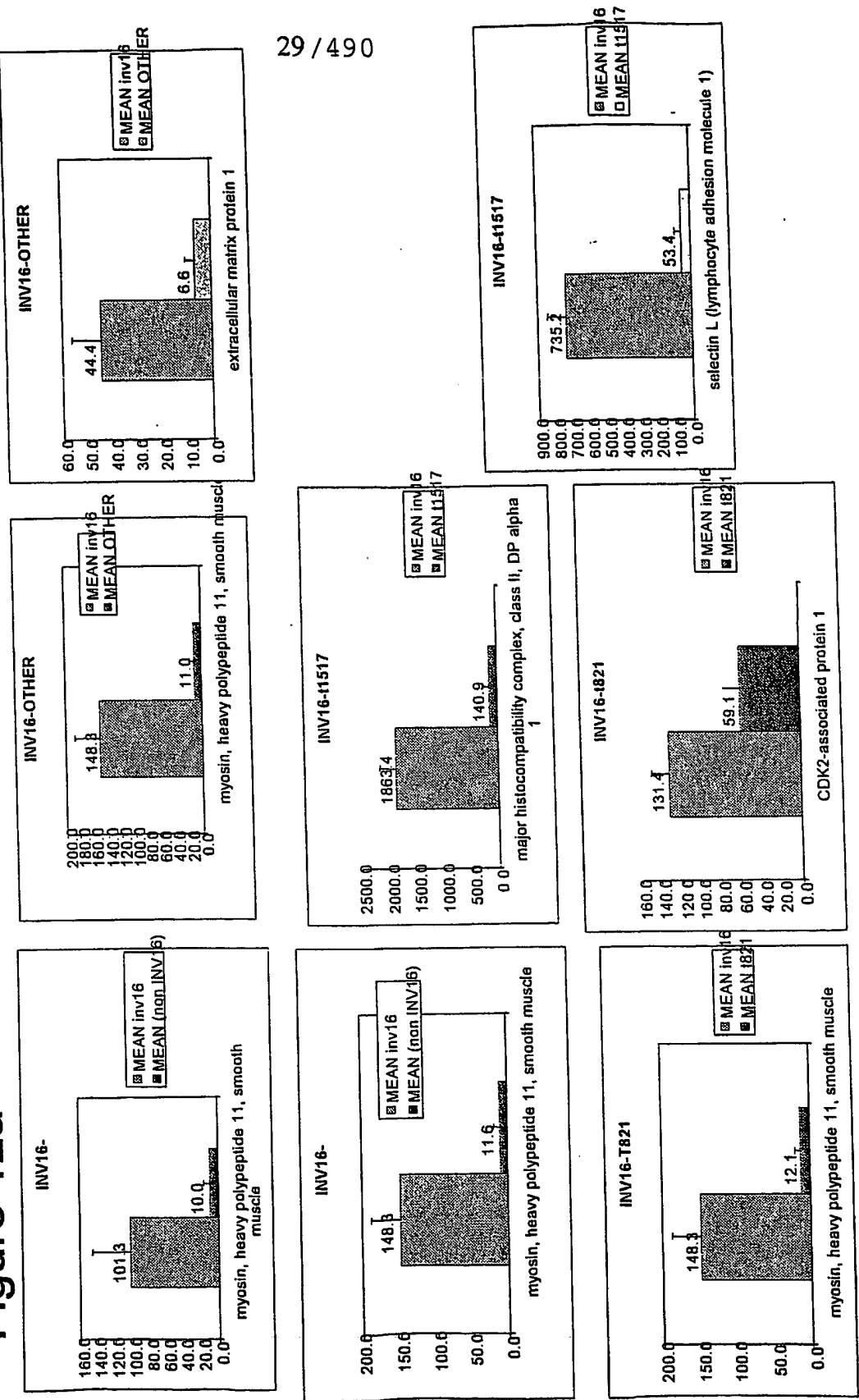


Figure 12b

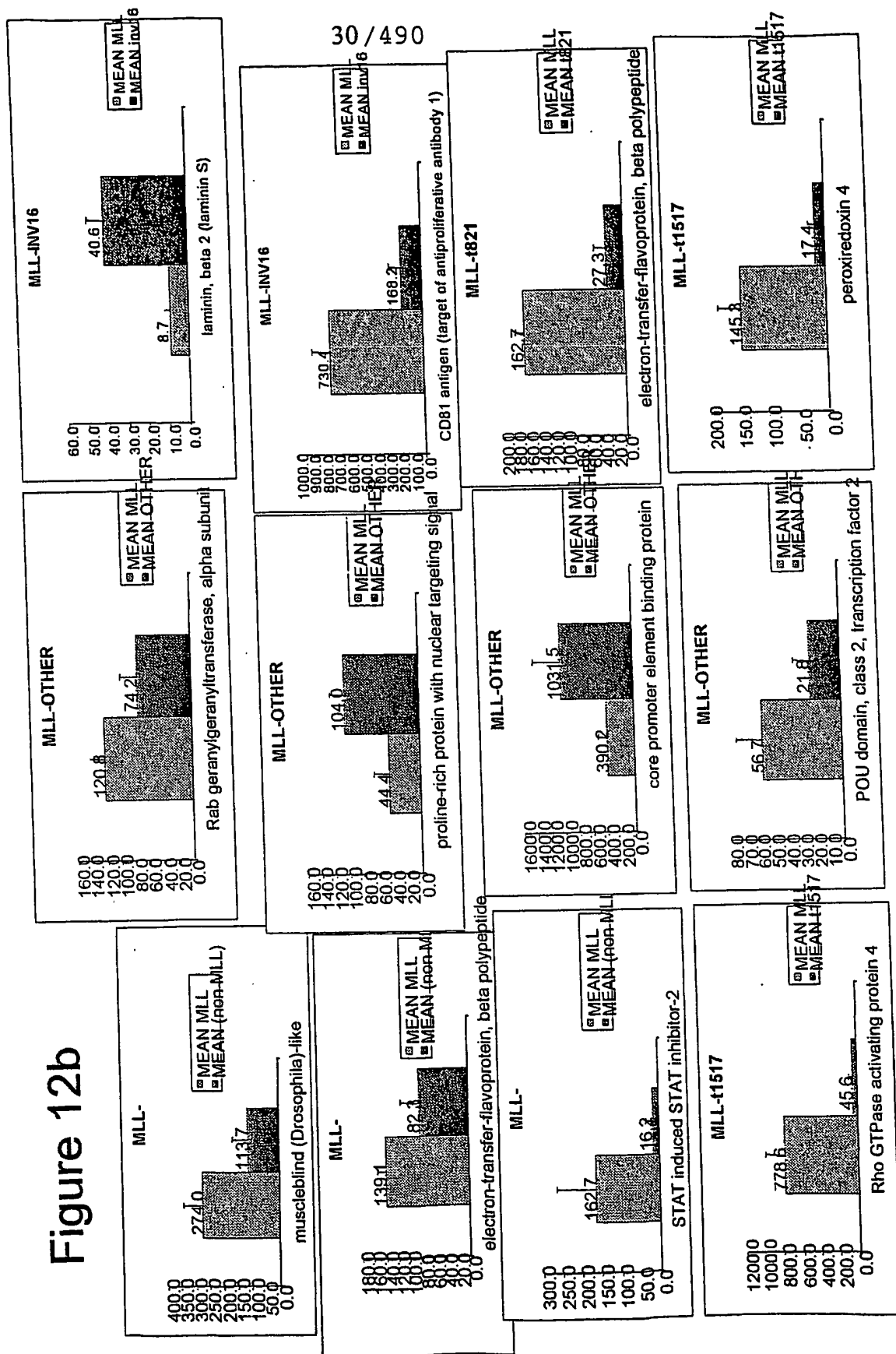


Figure 12c

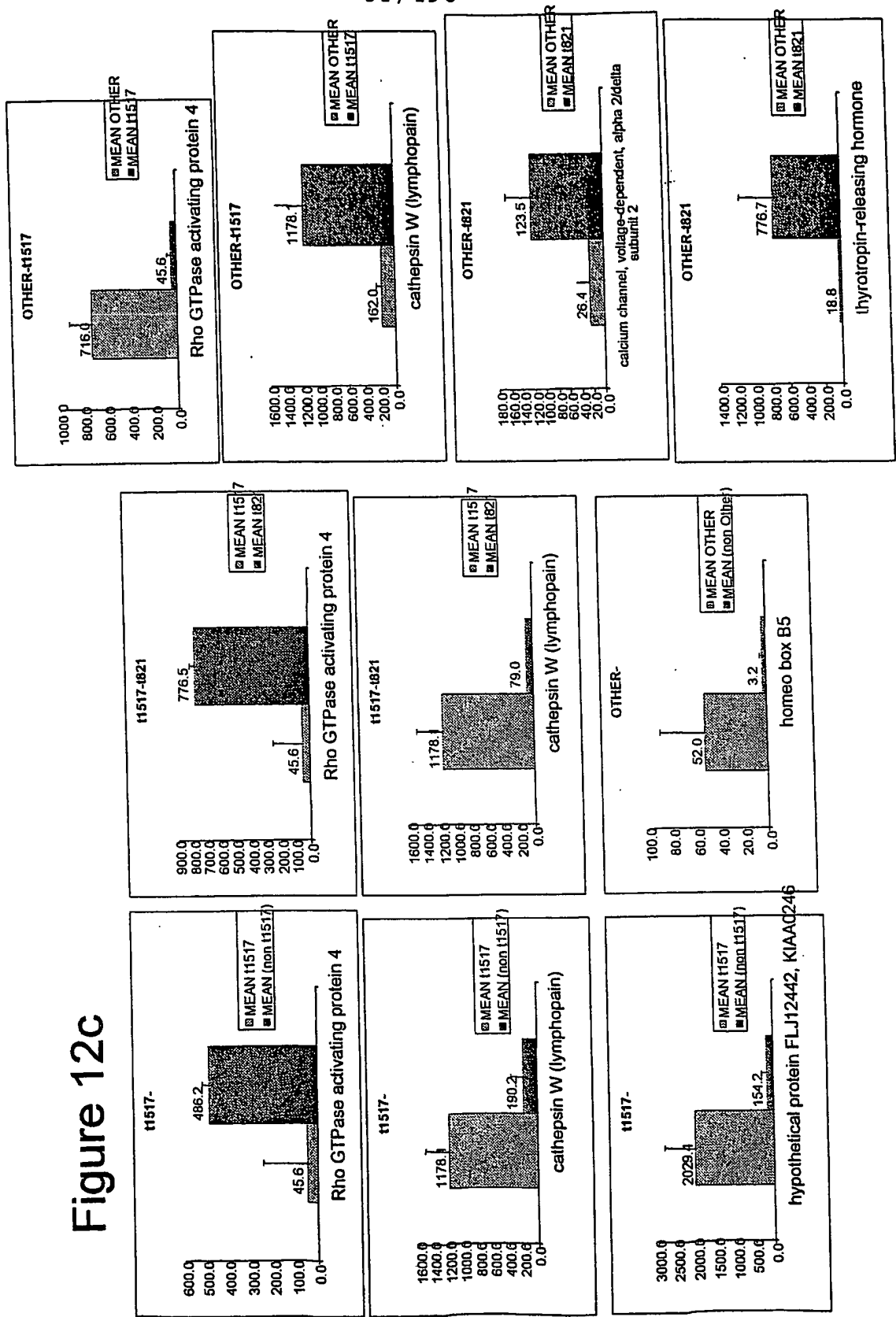


Figure 12d

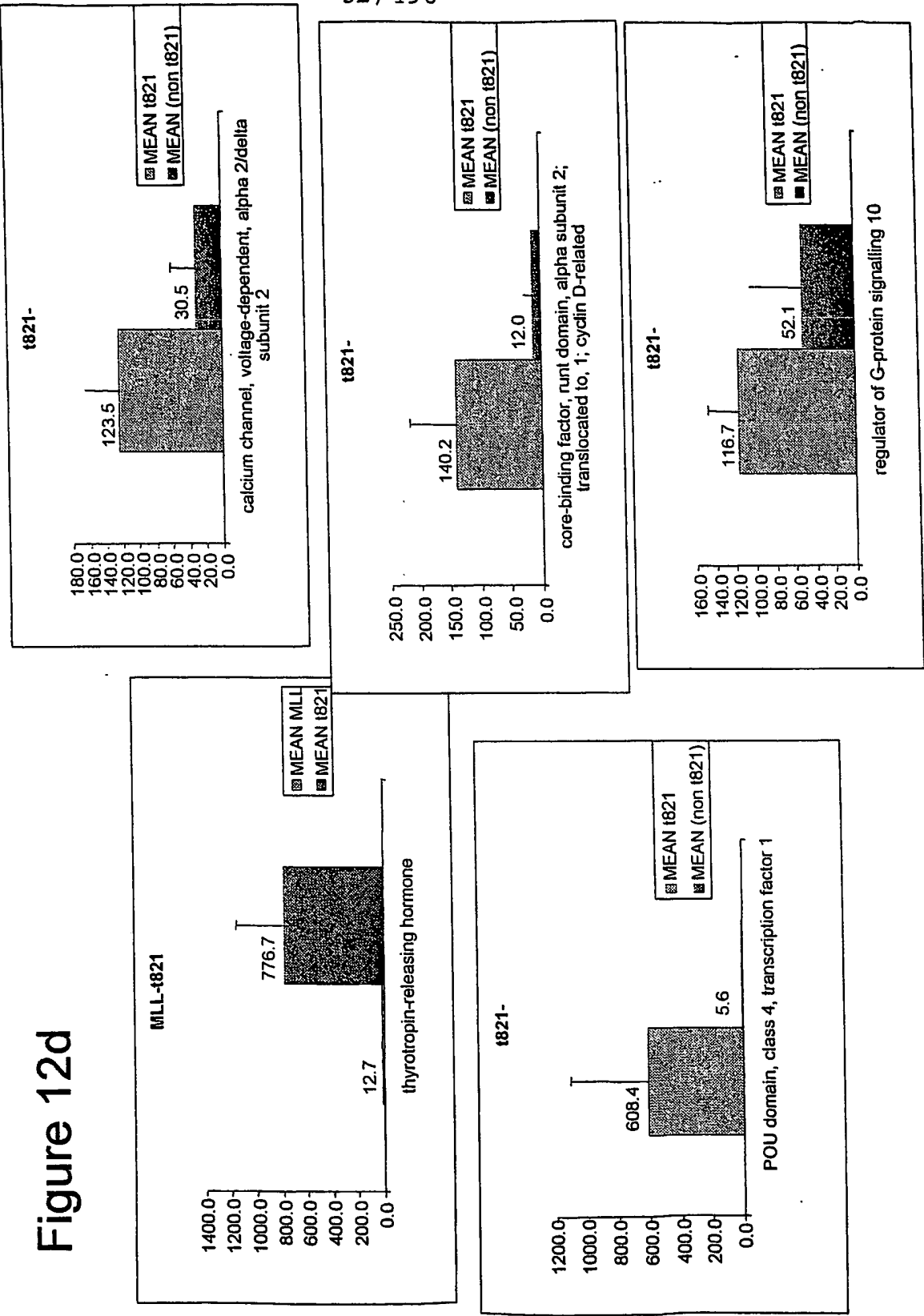
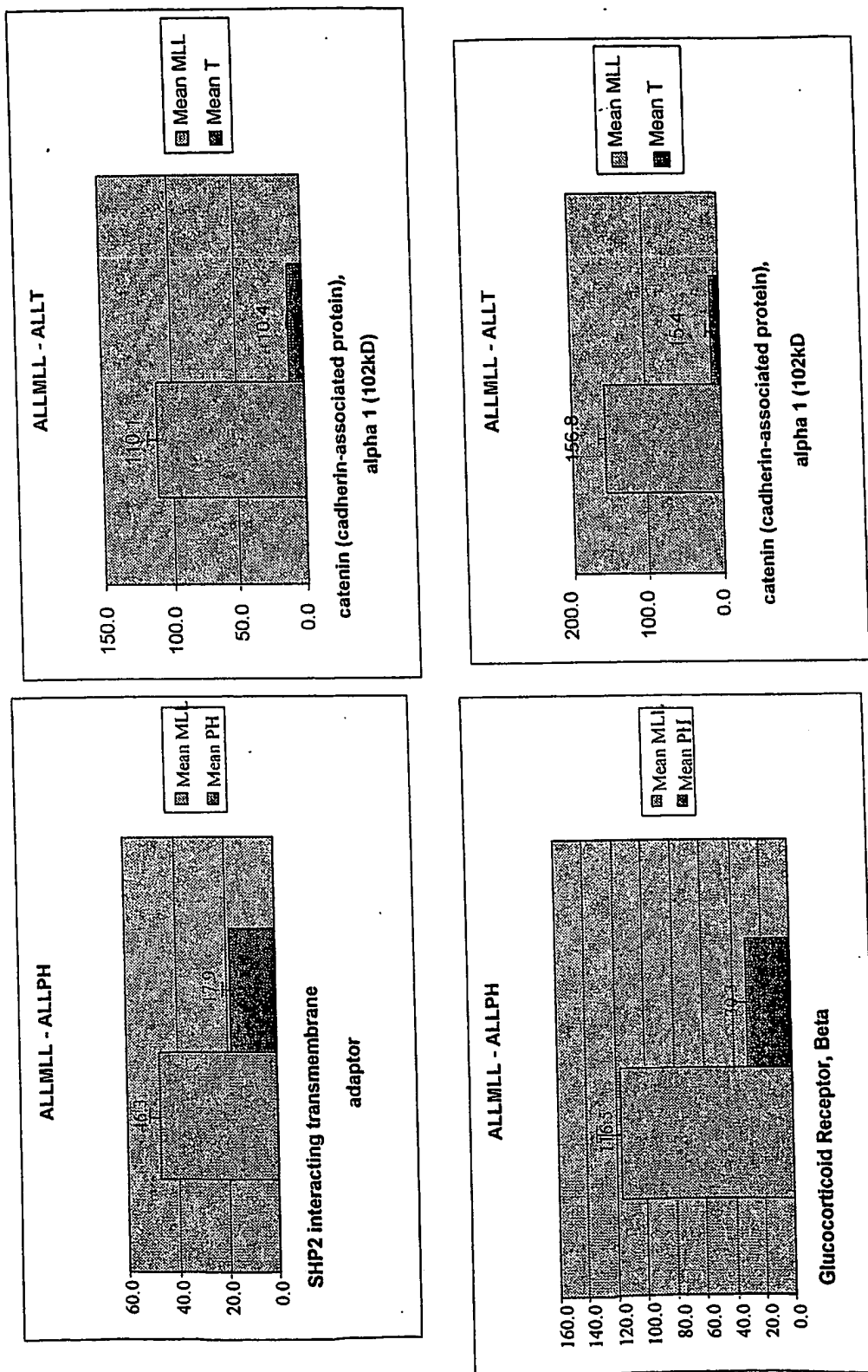
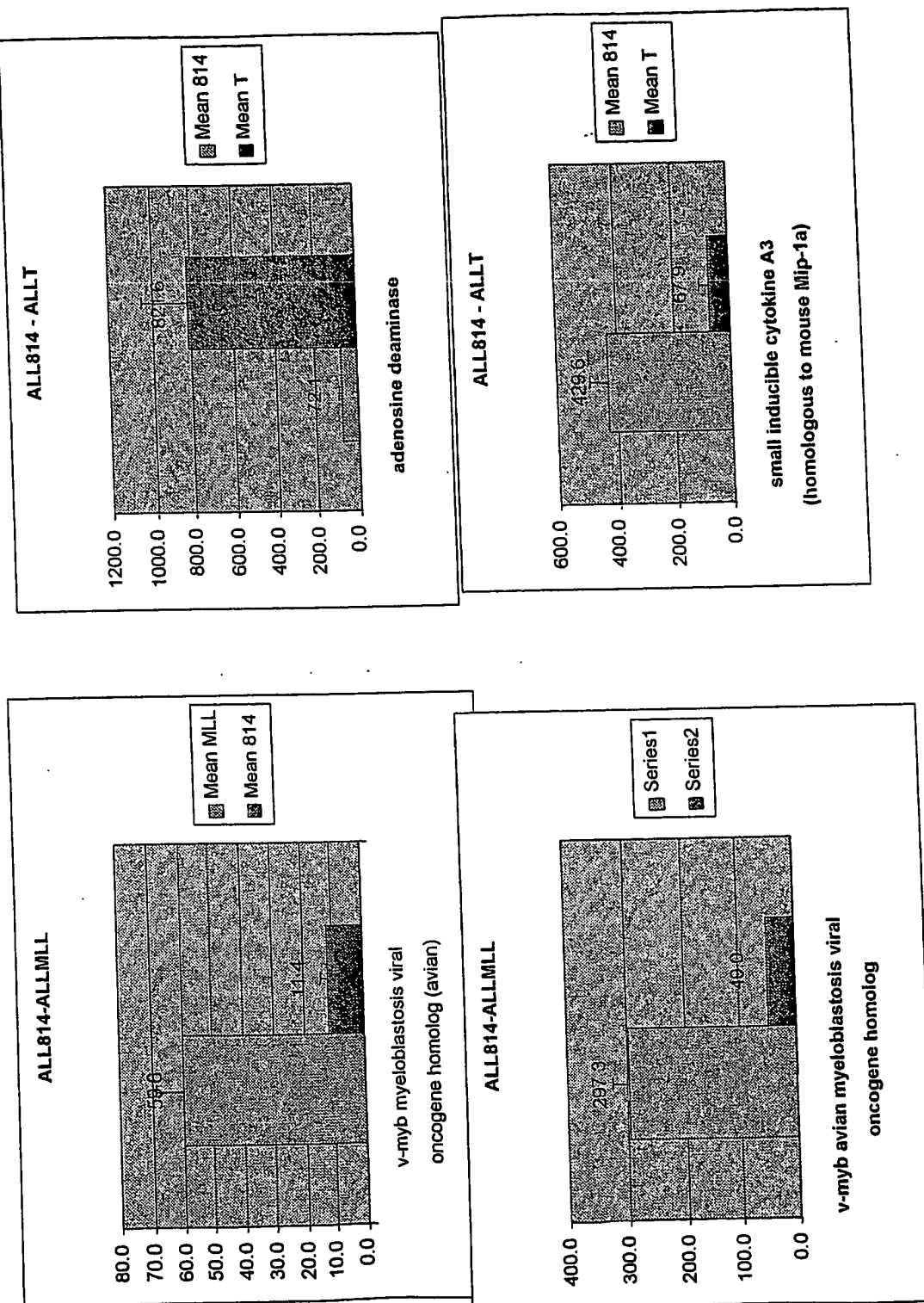


Figure 12e



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Figure 12f



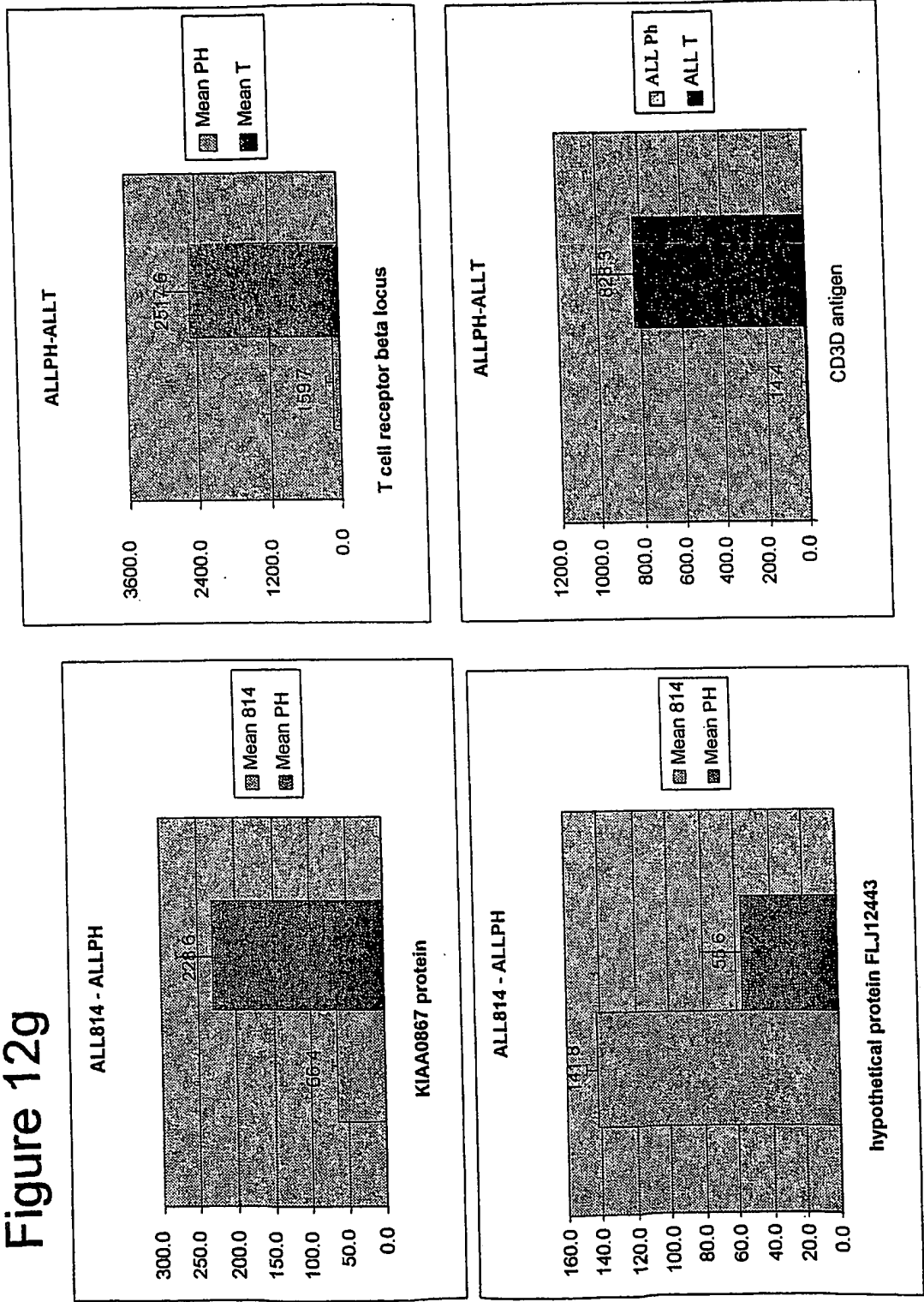
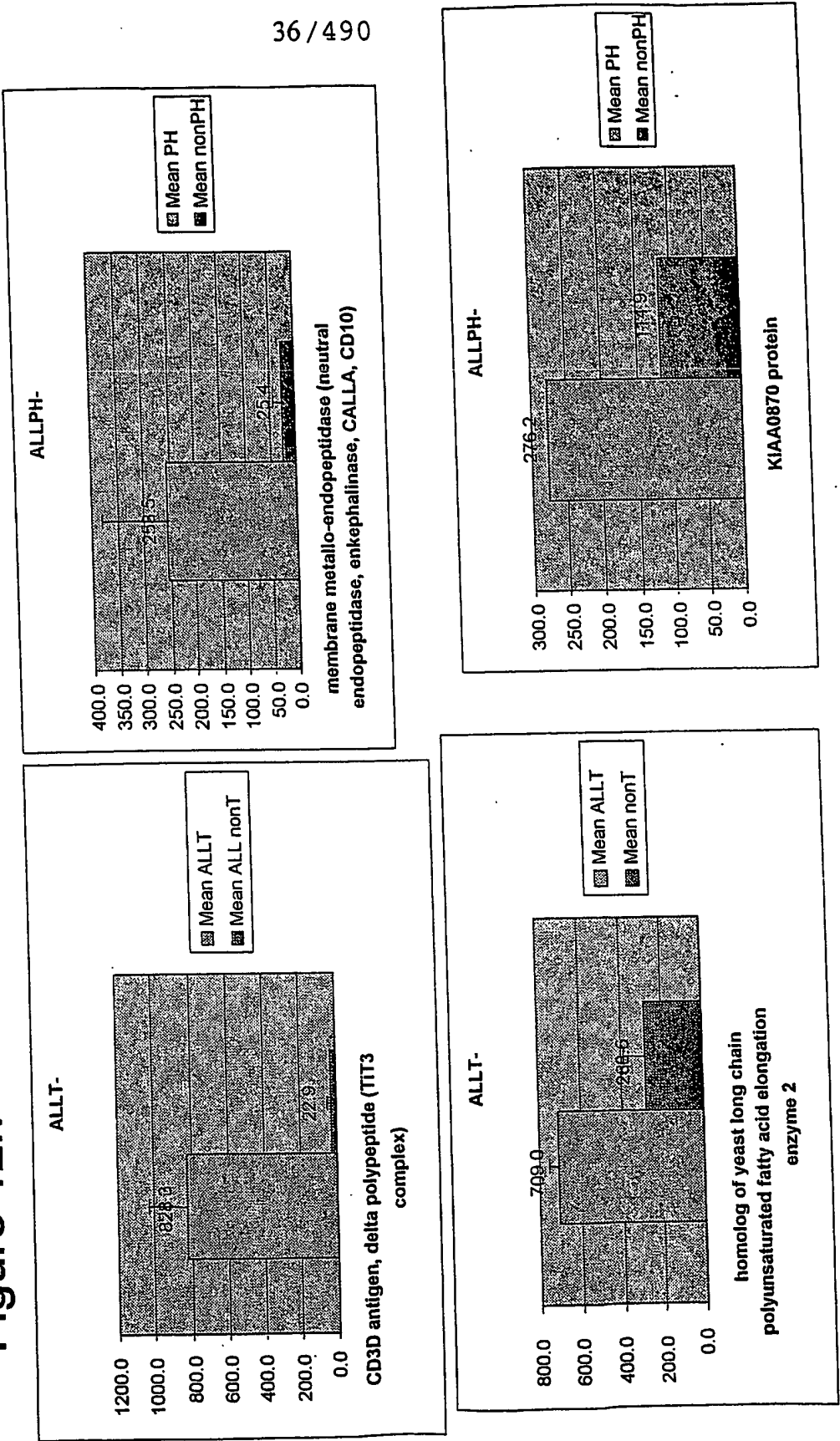


Figure 12h





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Figure 12i

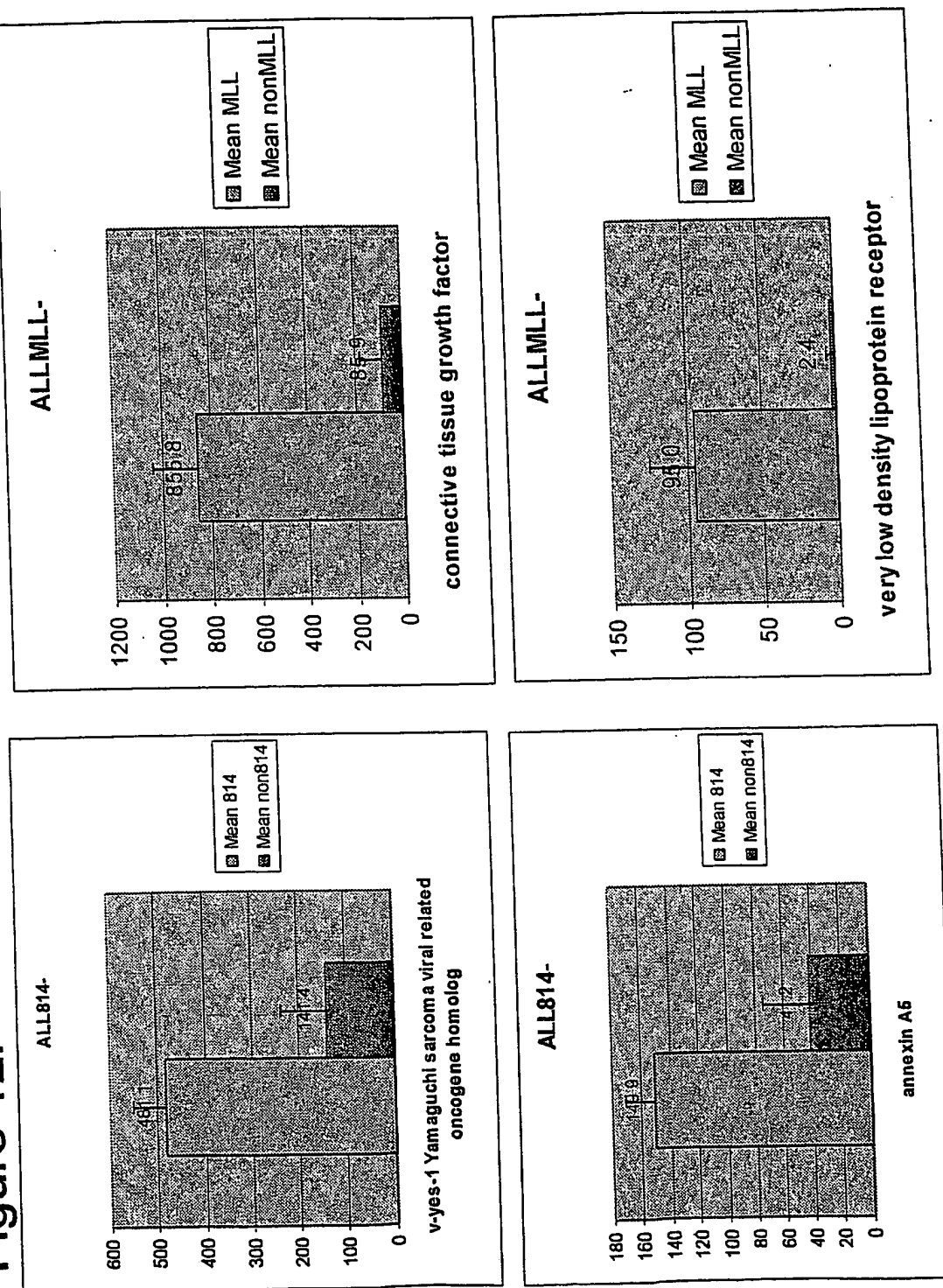


Figure 13a

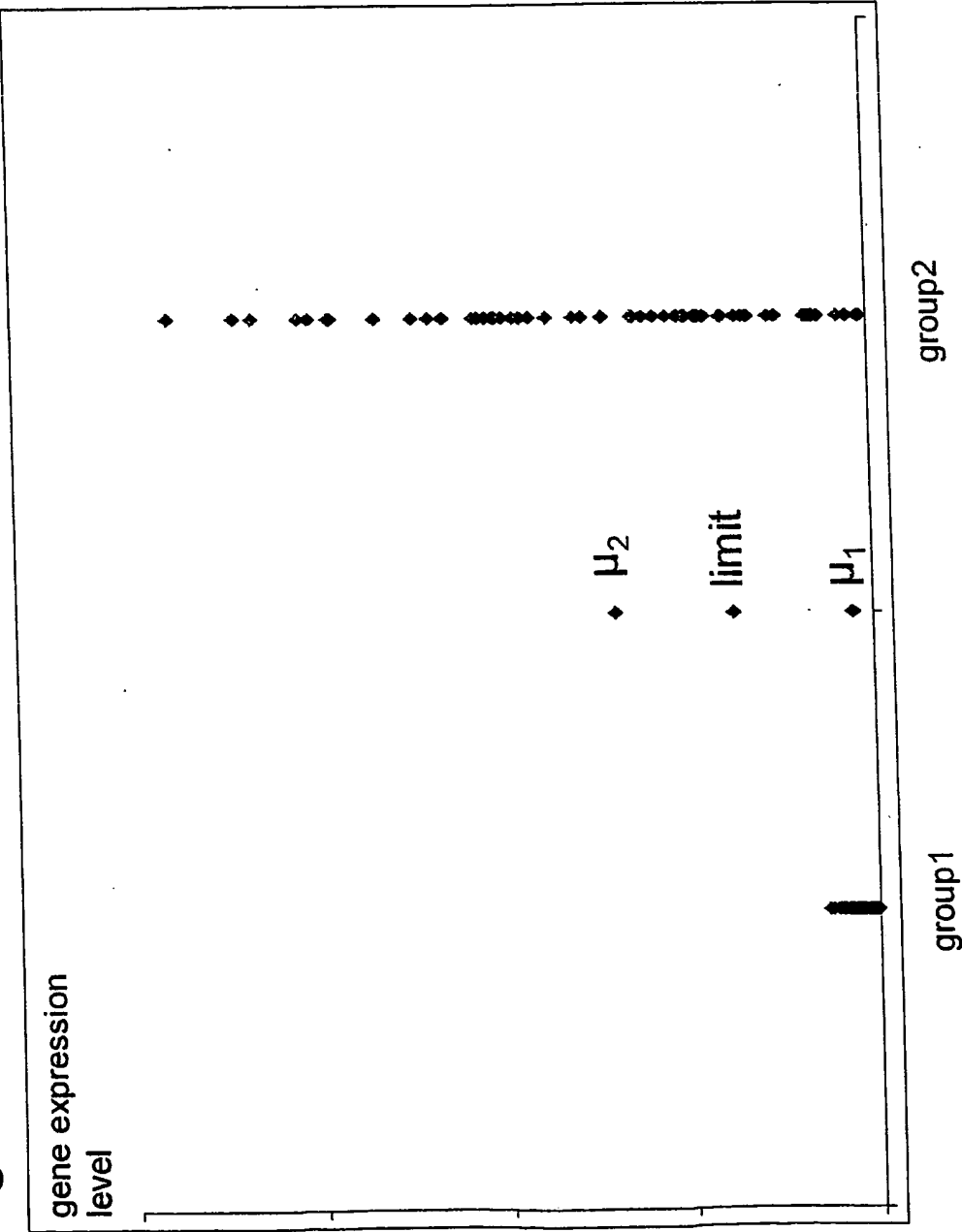
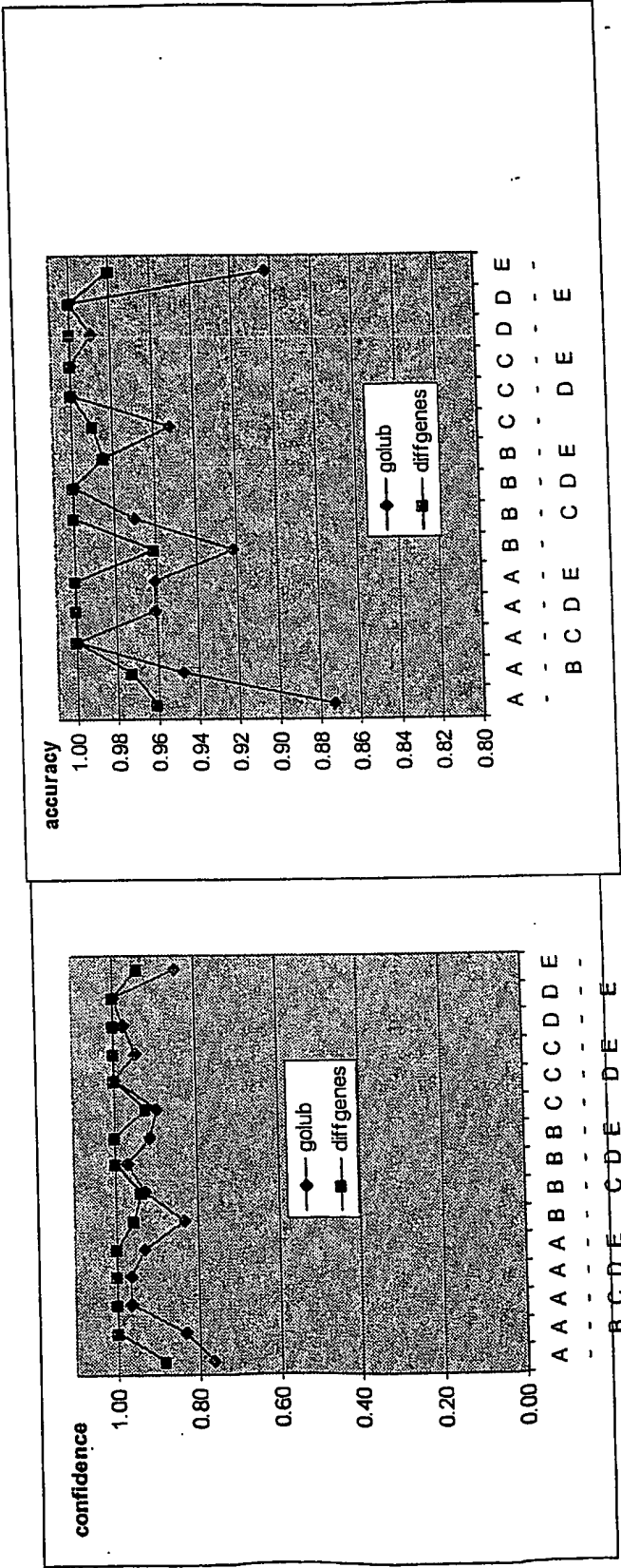
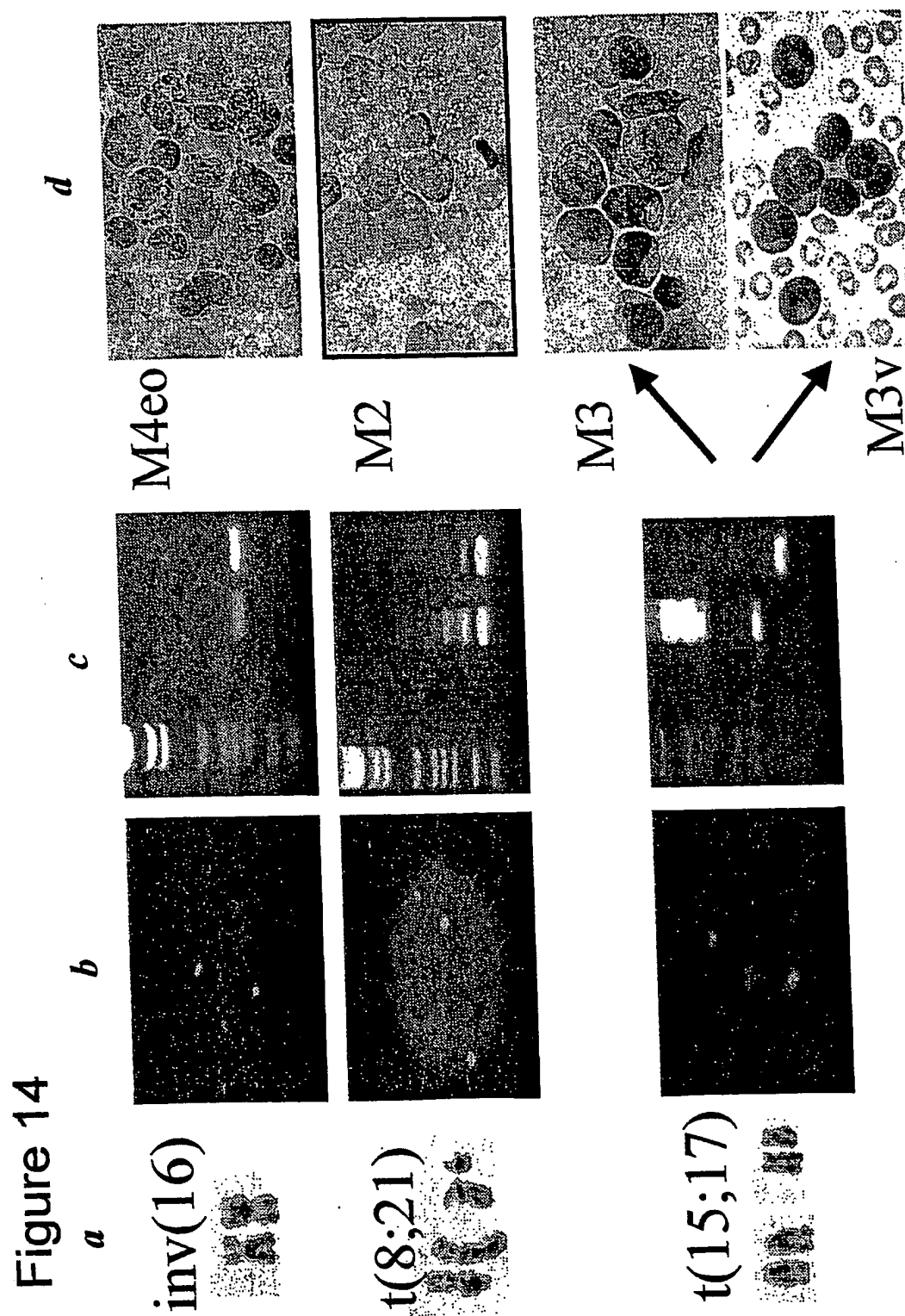
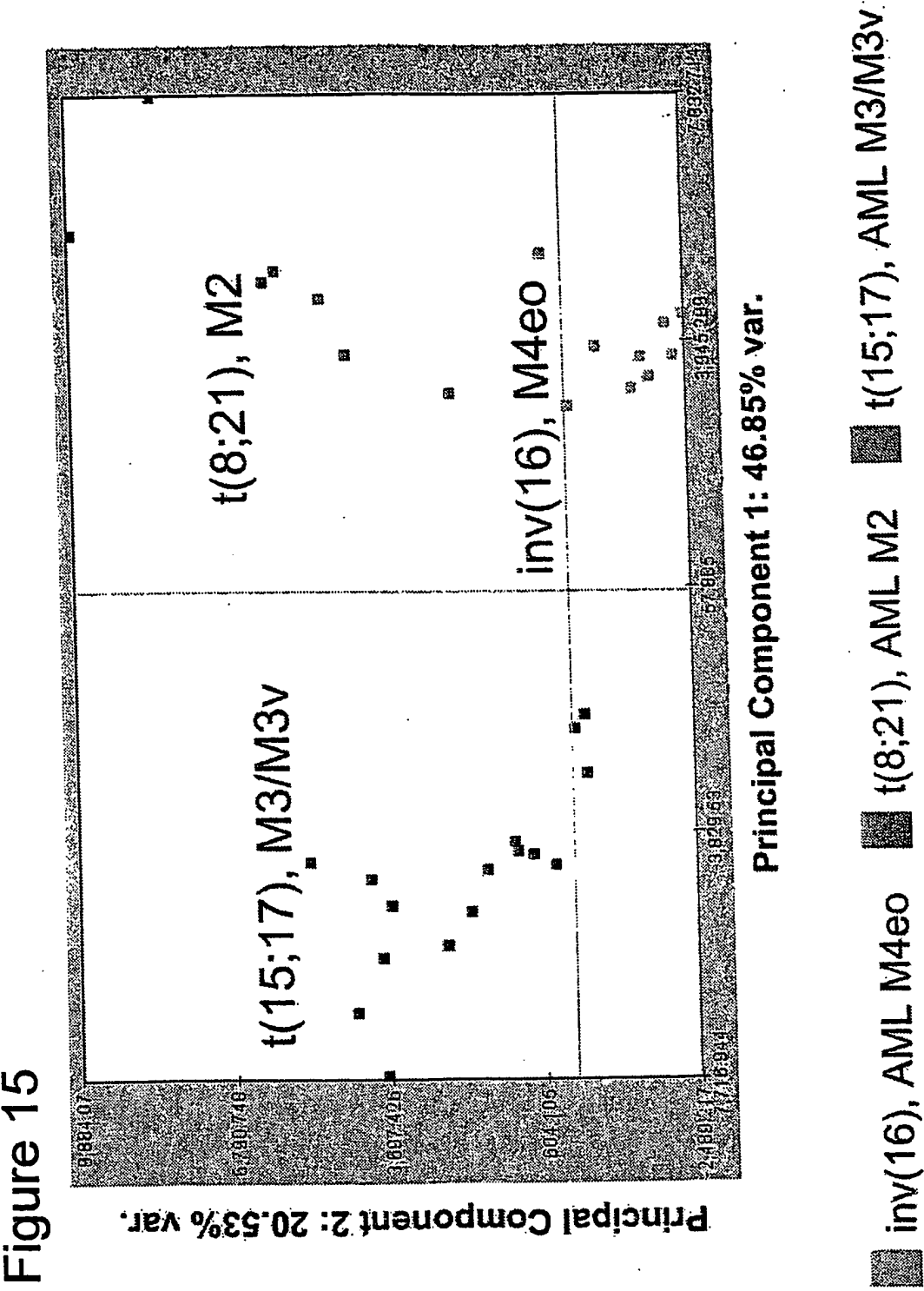


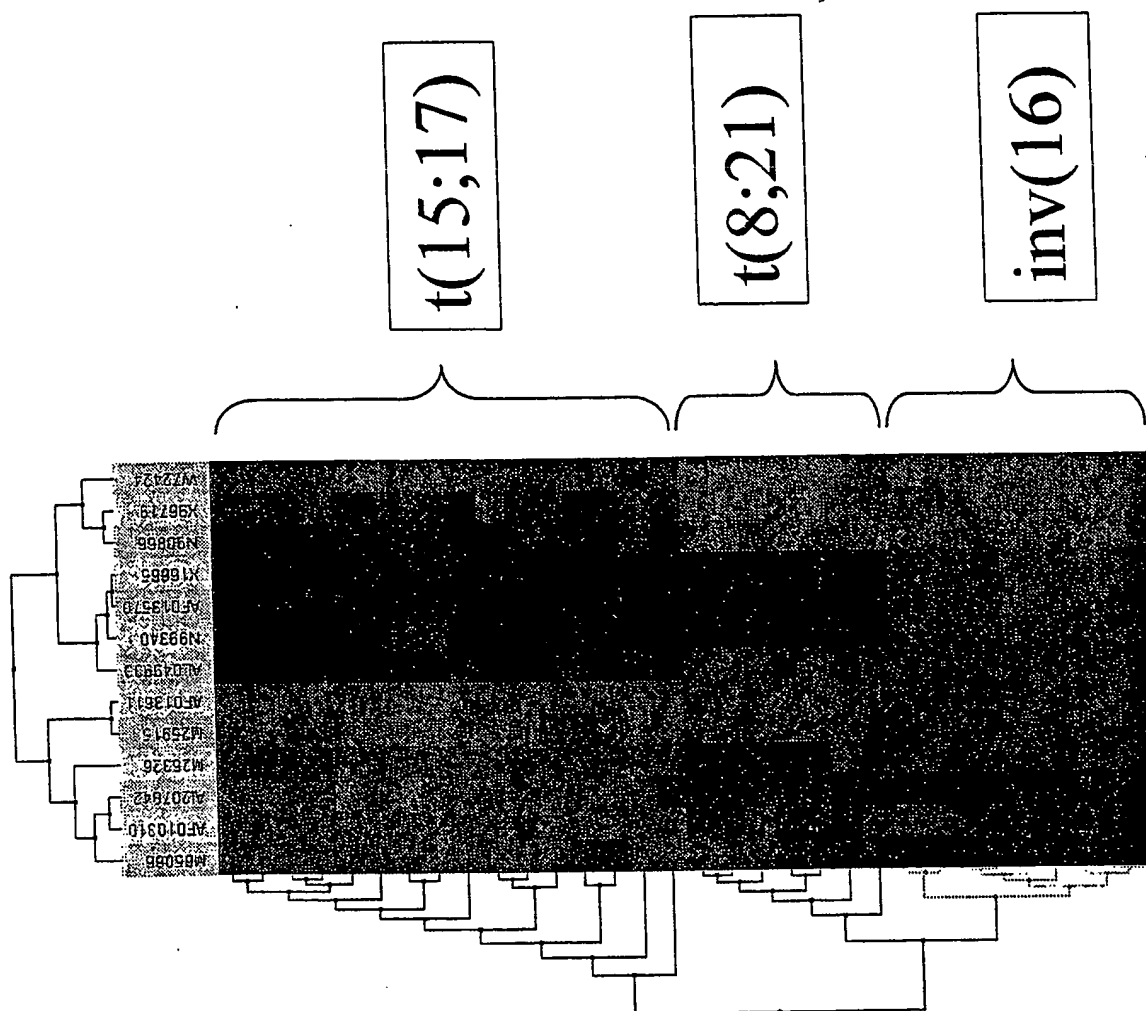
Figure 13b



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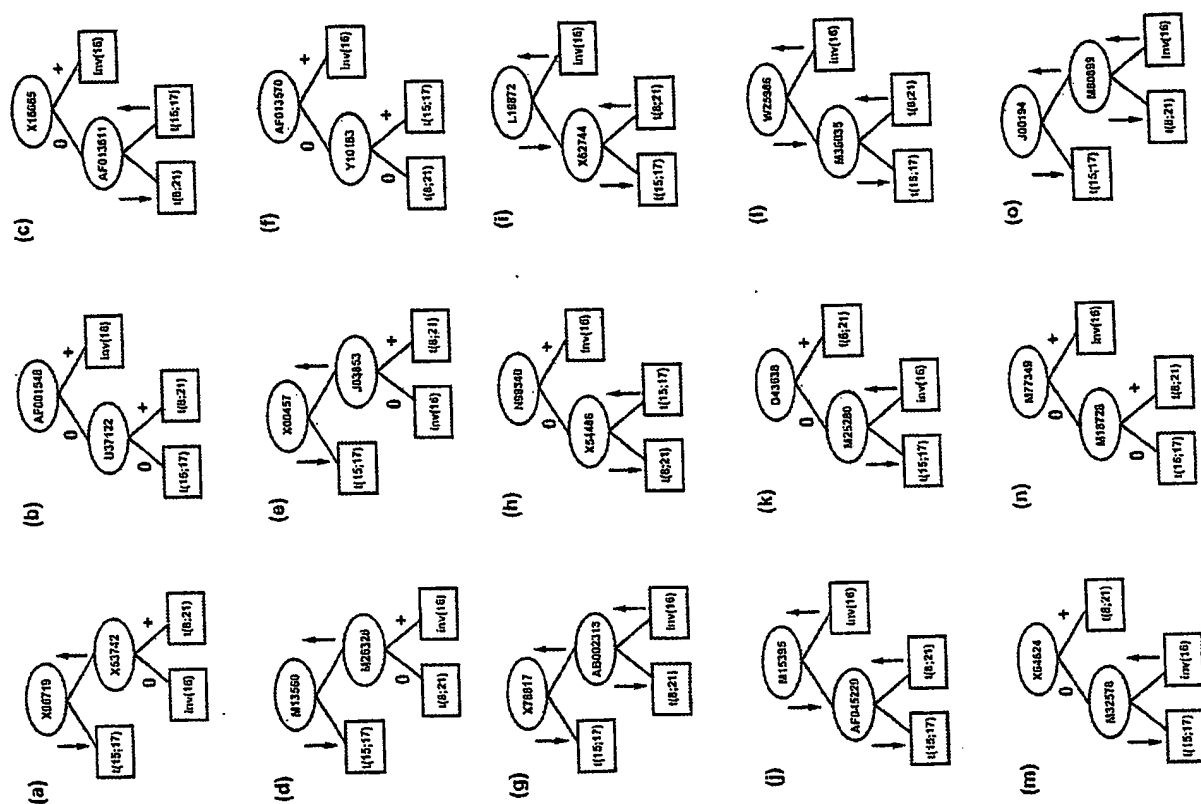


Figure 17

Figure 18

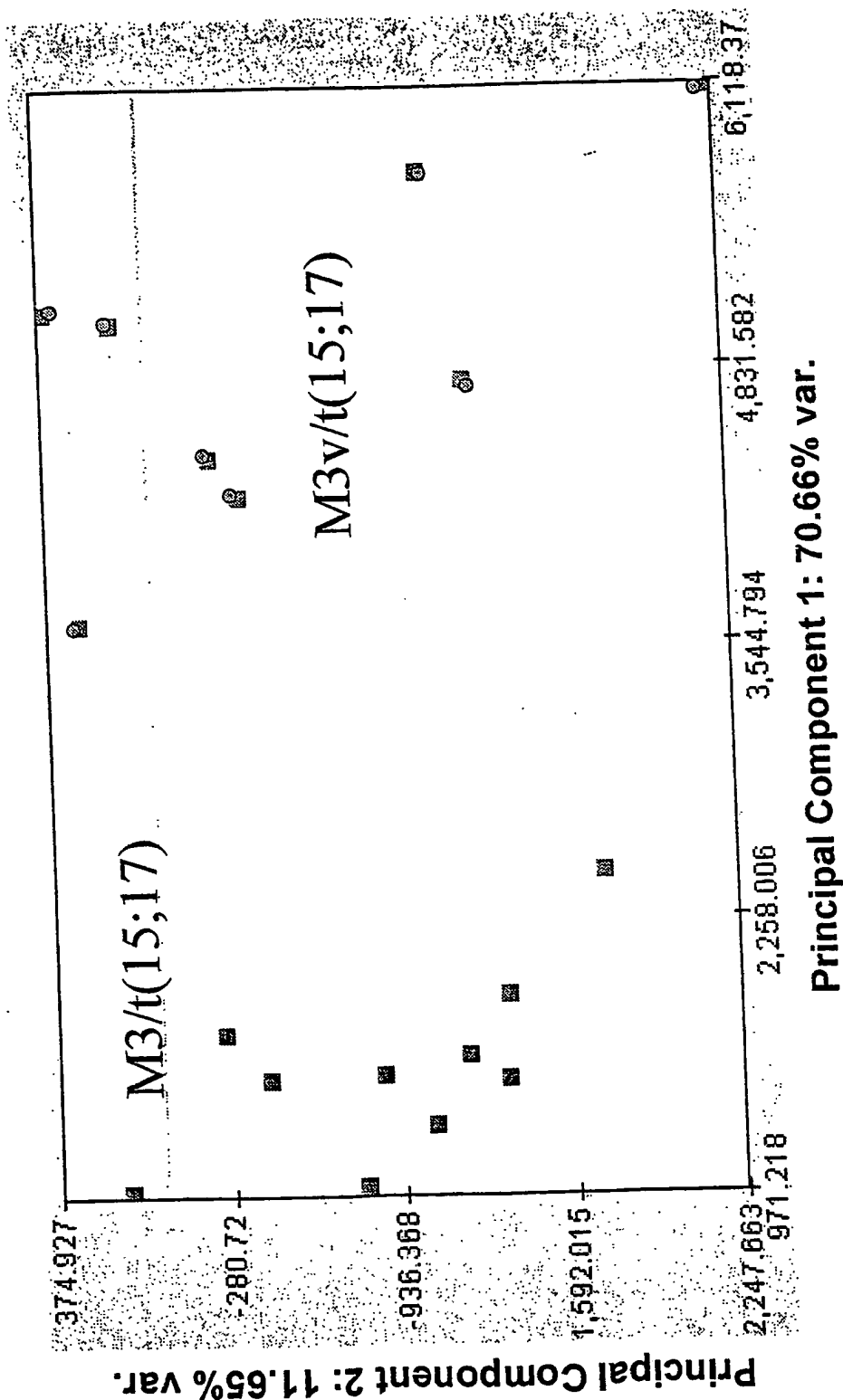
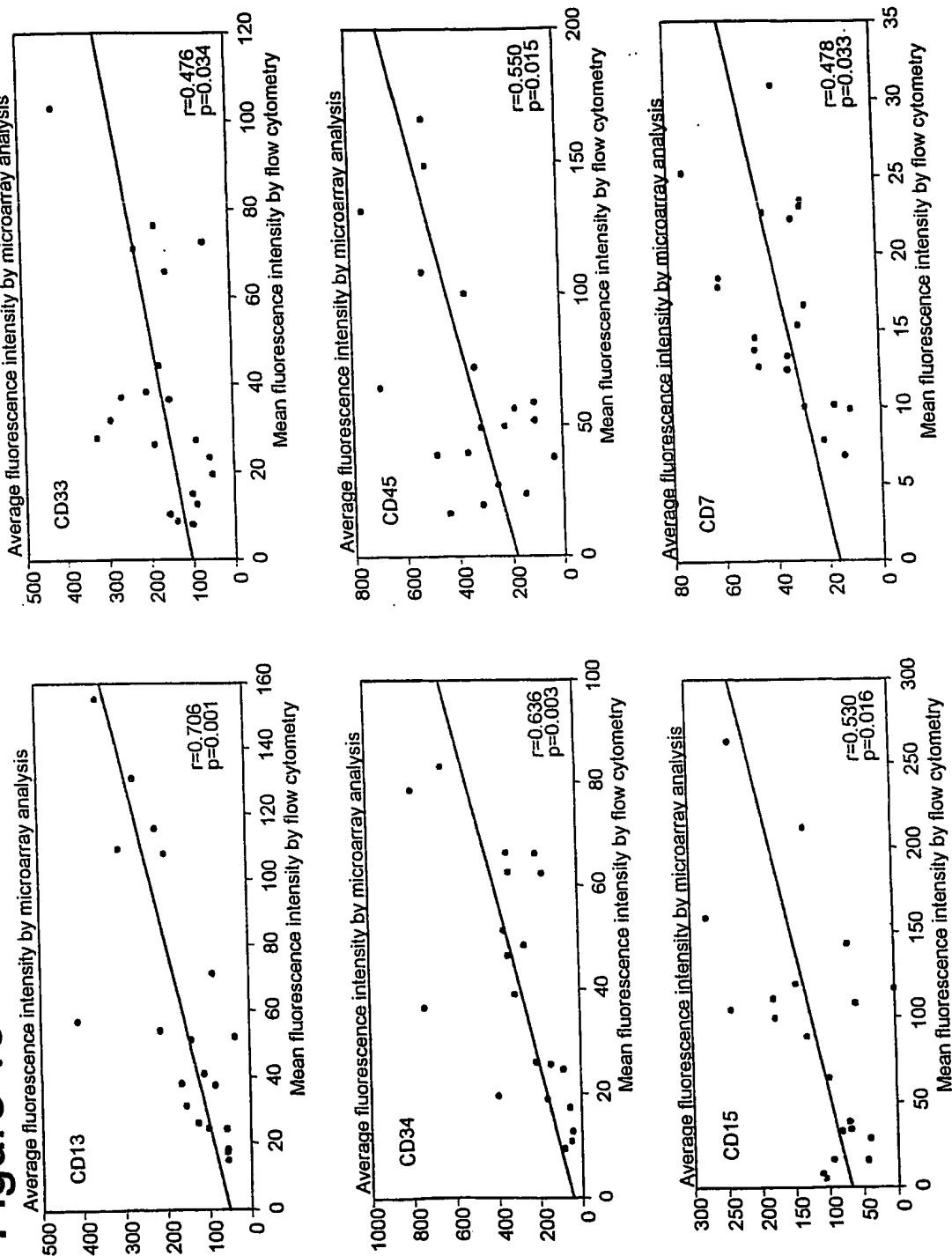


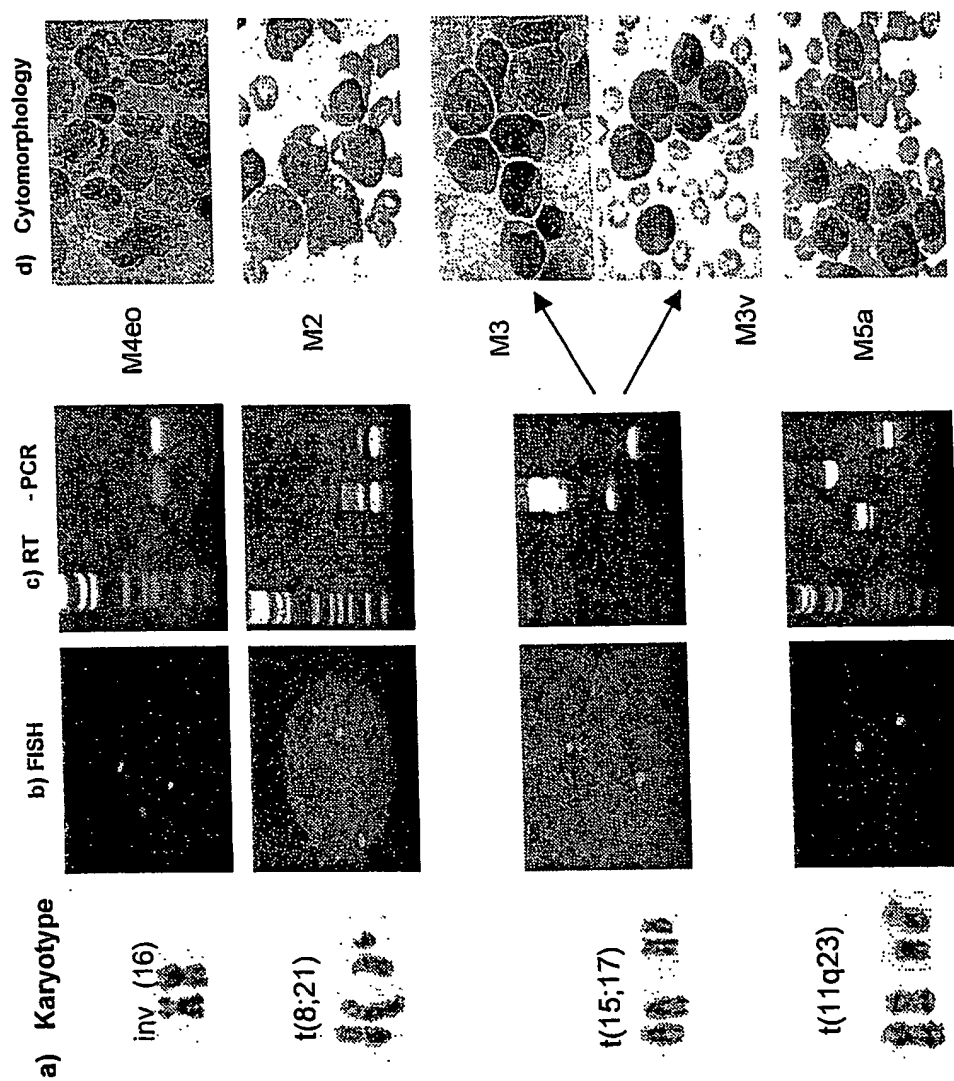


Figure 19



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Figure 20



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Figure 21

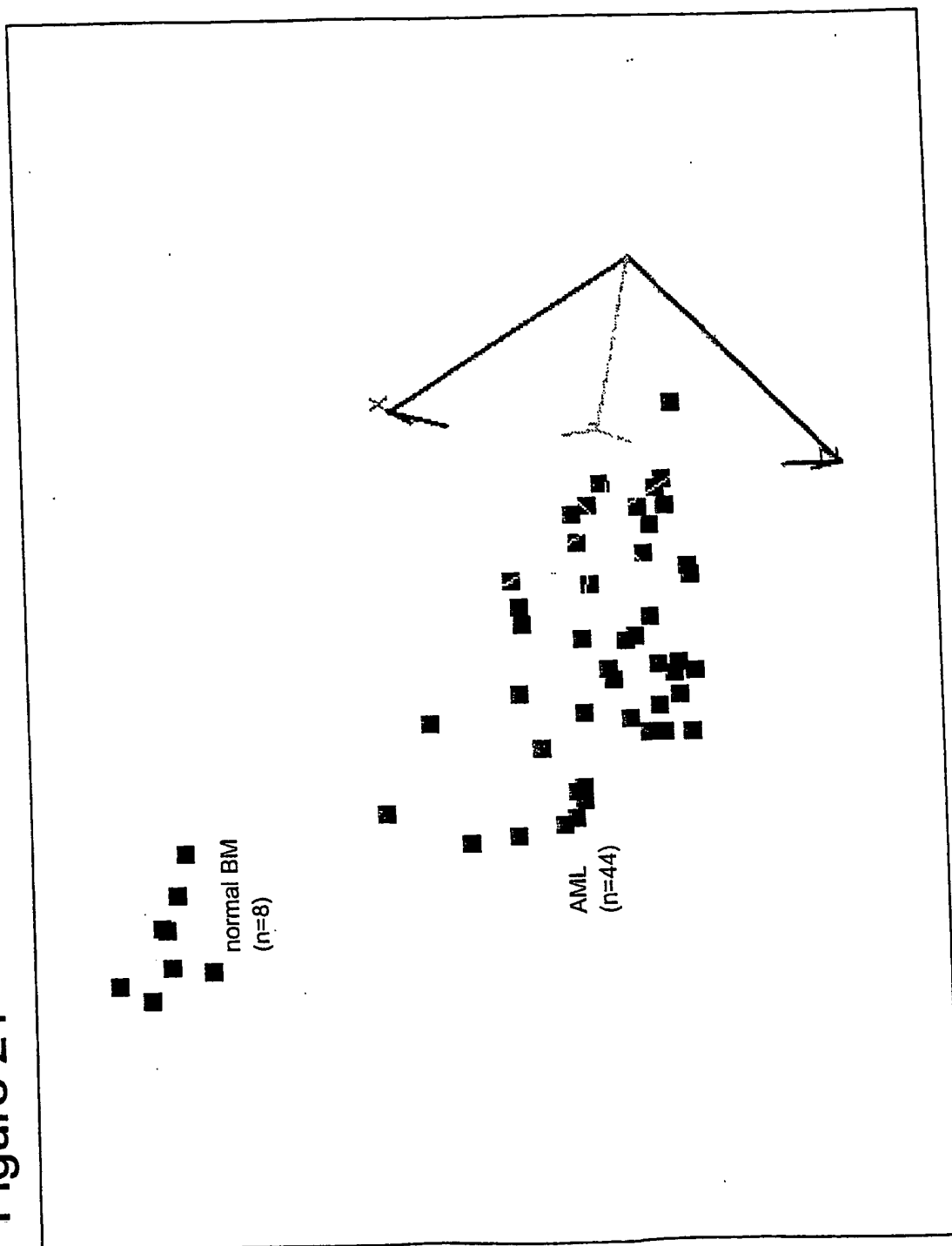
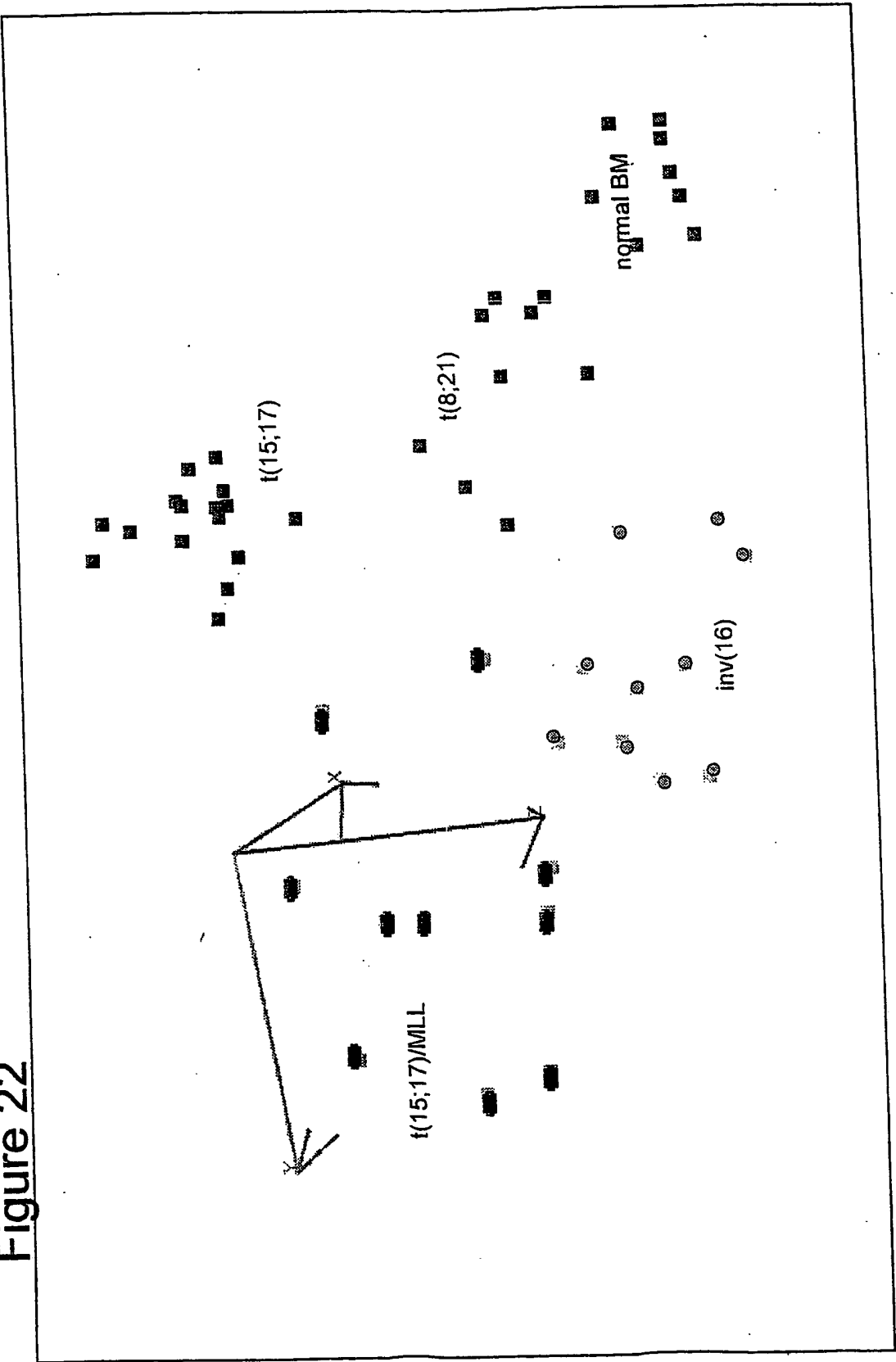
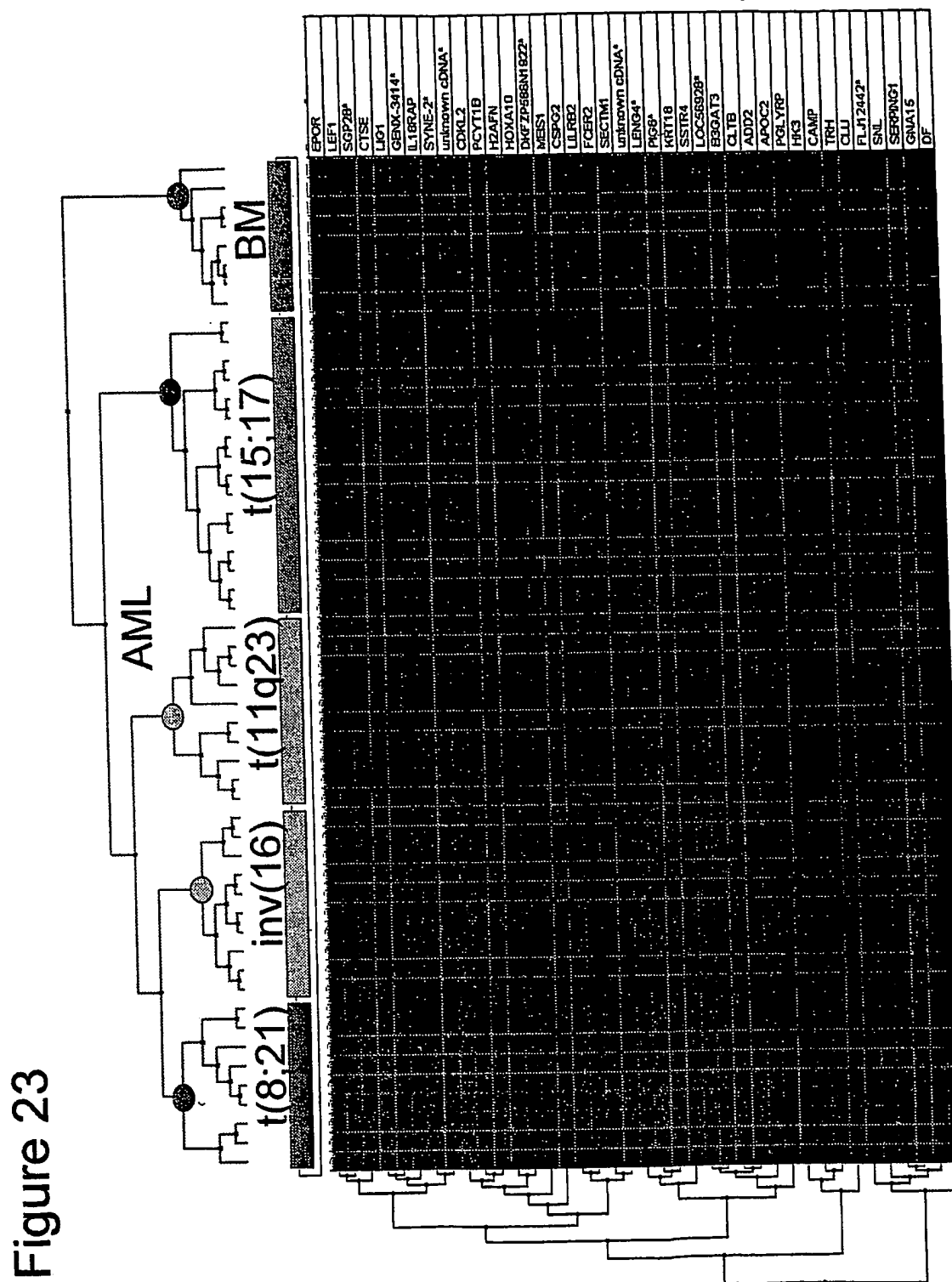


Figure 22





# 219033\_at, FLJ21308, ALL t(4;11) vs. all other

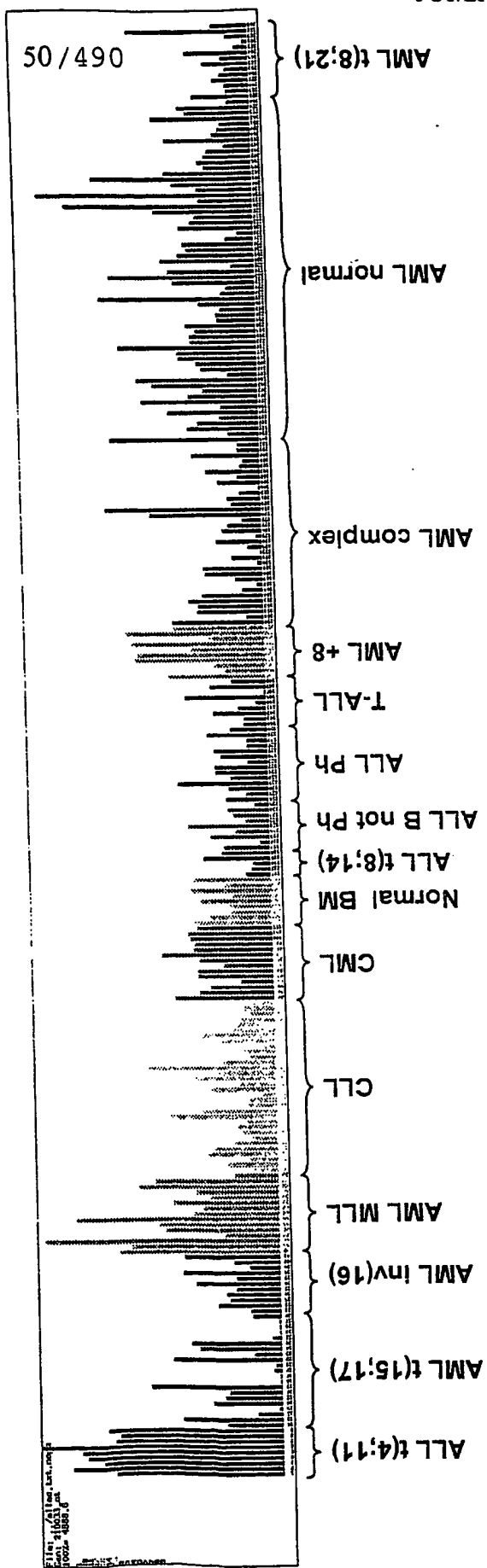


Figure 24

# 227407\_at, ALL t(4;11) vs. all others

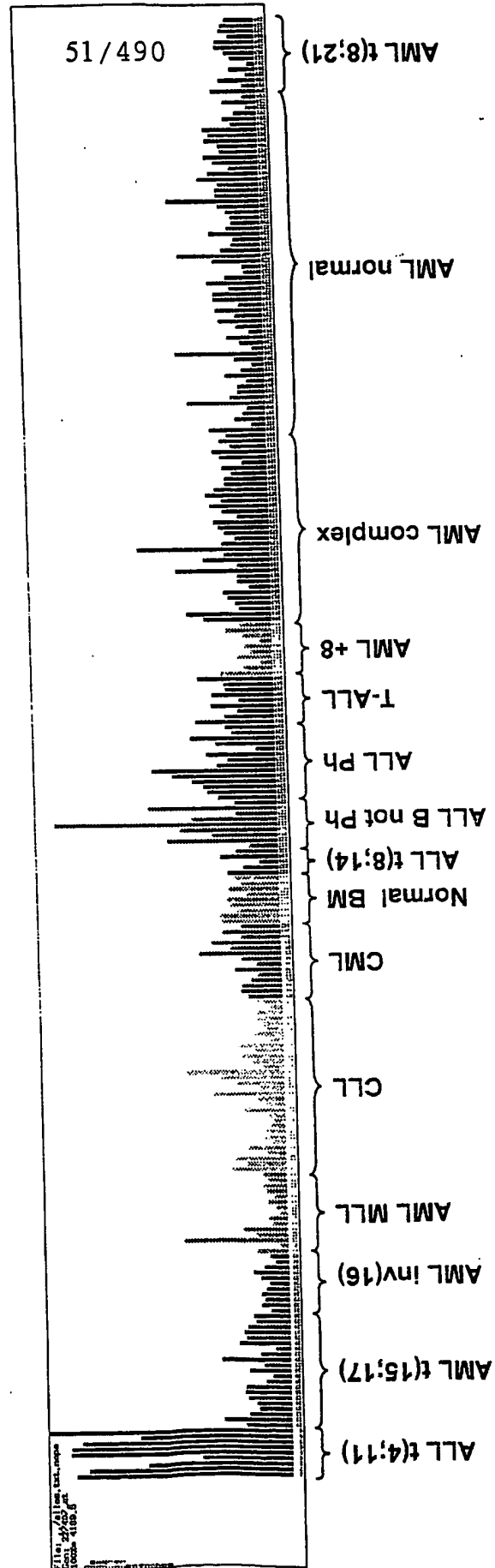


Figure 25

# 239214\_at, ALL t(4;11) vs. all others

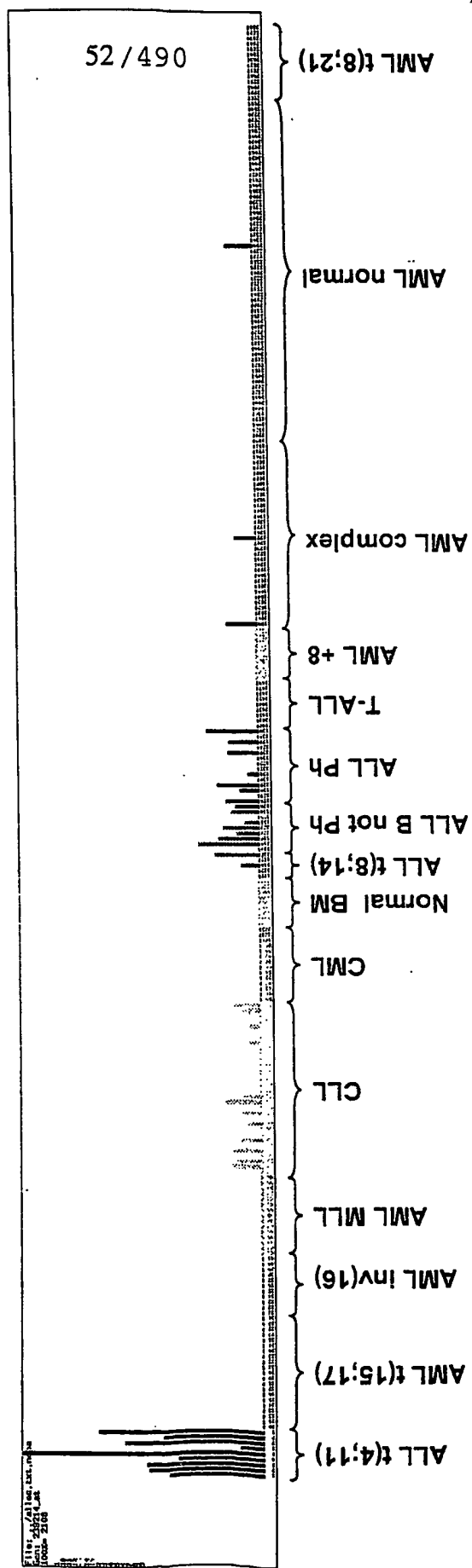


Figure 26



# 221969\_at, PAX5, ALL t(4;11) vs. AML t(15;17)

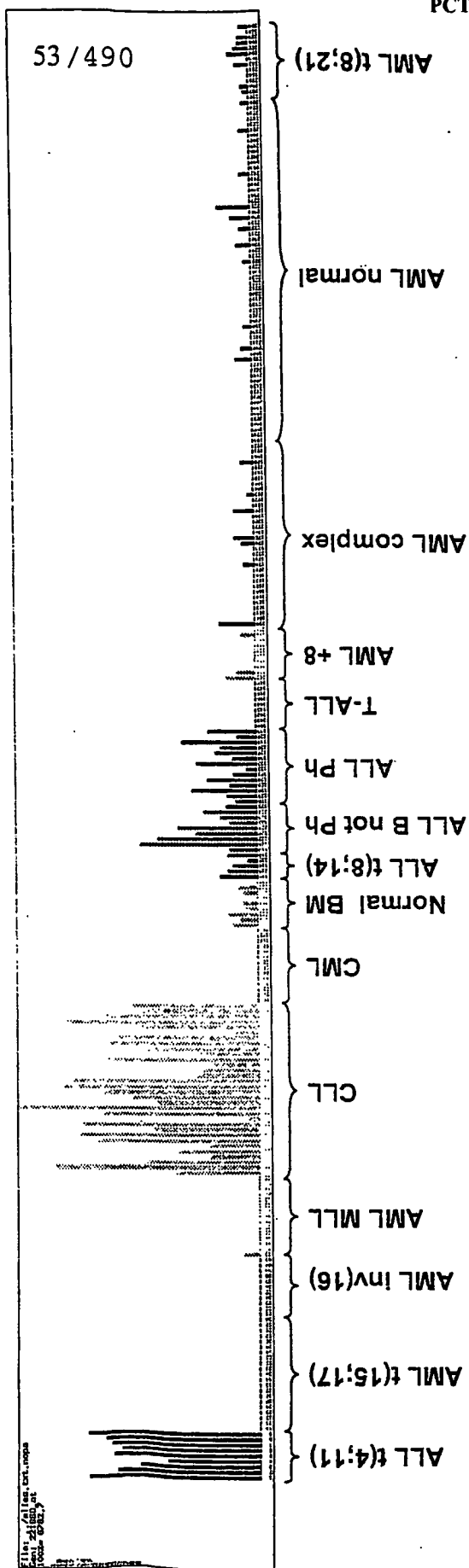


Figure 27

# 225653\_at, ALL t(4;11) vs. AML inv(16)

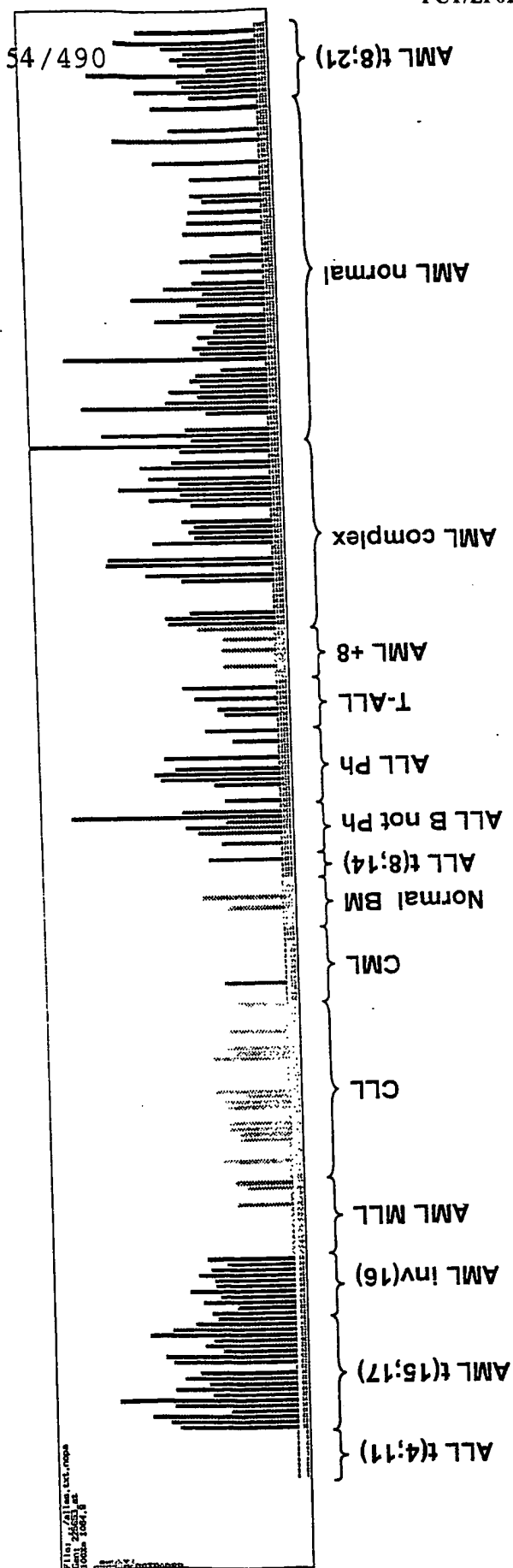


Figure 28

# 221969\_at, ALL t(4;11) vs. AML MLL

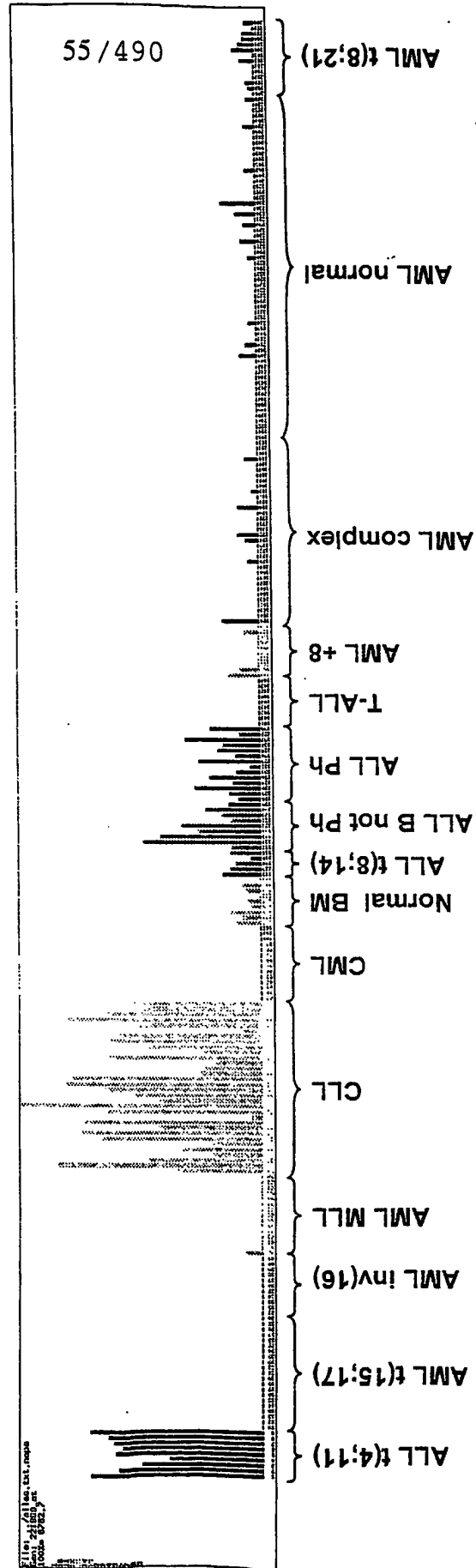


Figure 29

# 210045\_at, IDH2, ALL t(4;11) vs. CLL

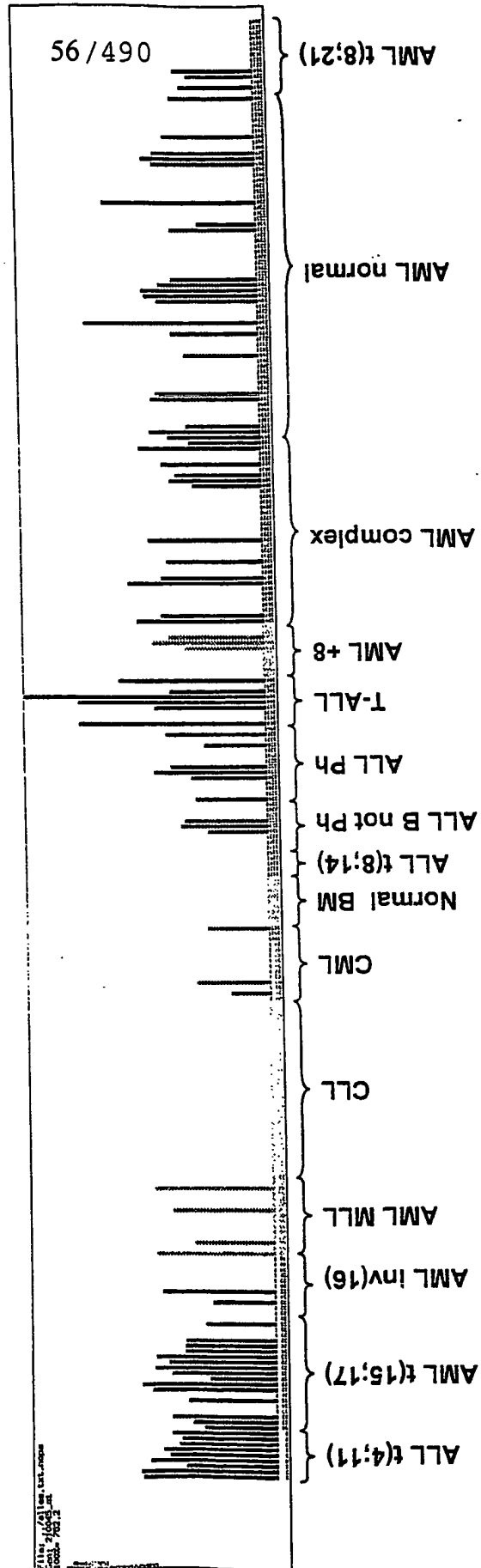


Figure 30

# 221969\_at, PAX5, ALL t(4;11) vs. CML

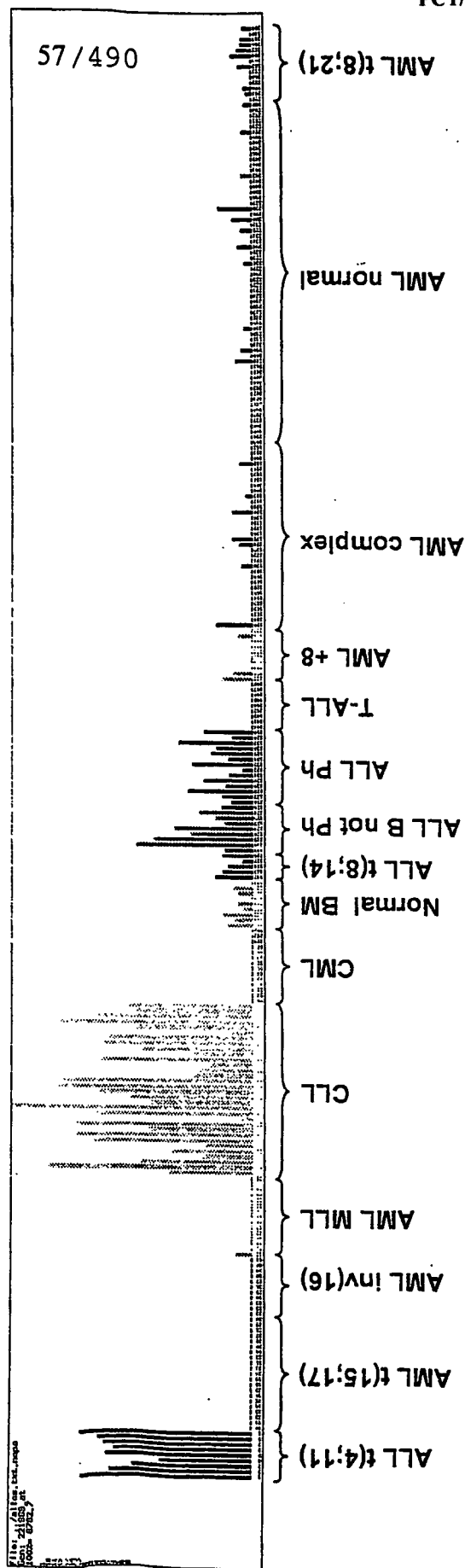


Figure 31

# 201828\_x\_at, CXX1, ALL t(4;11) vs. normal BM

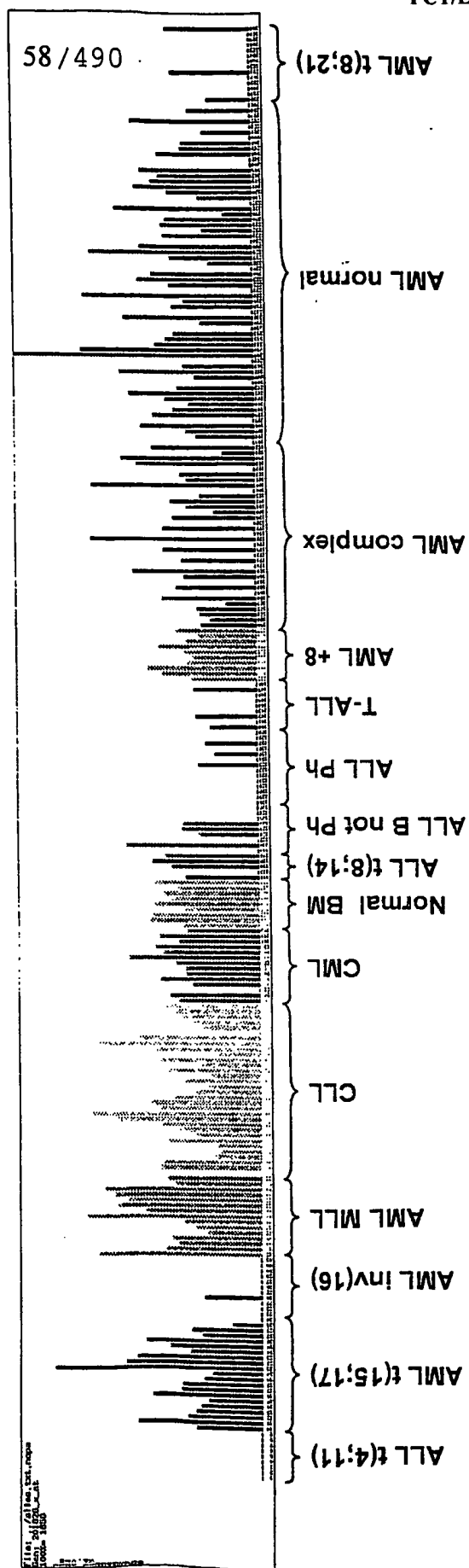


Figure 32

# 210045\_at, IDH2, ALL t(4;11) vs. ALL t(8;14)

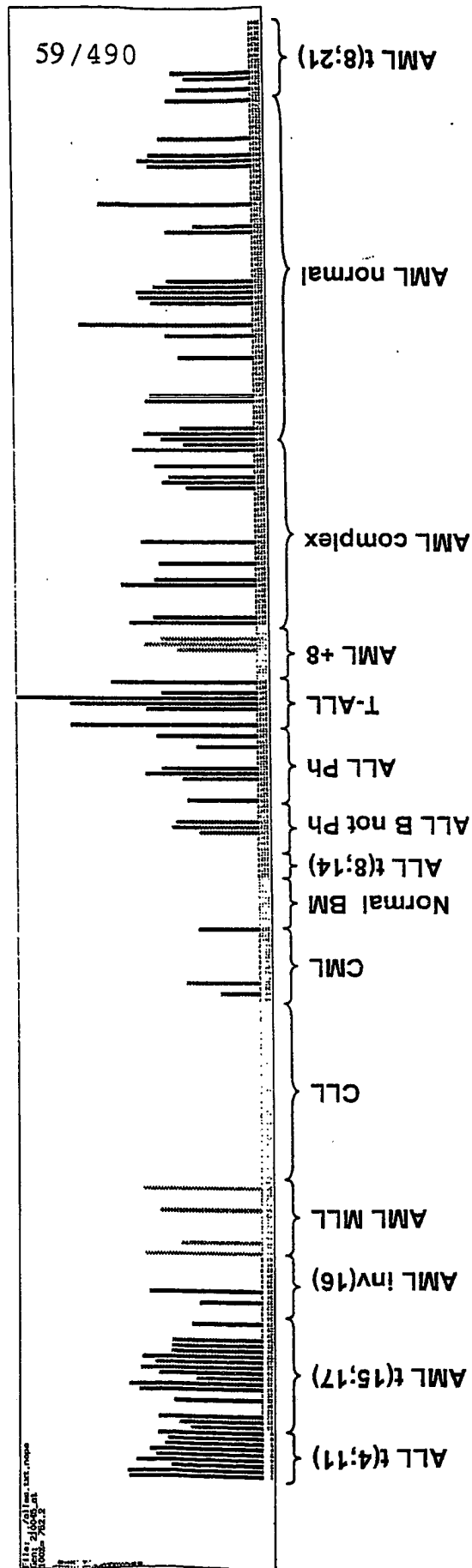


Figure 33

# 237431\_at, ALL t(4;11) vs. ALL B not Ph

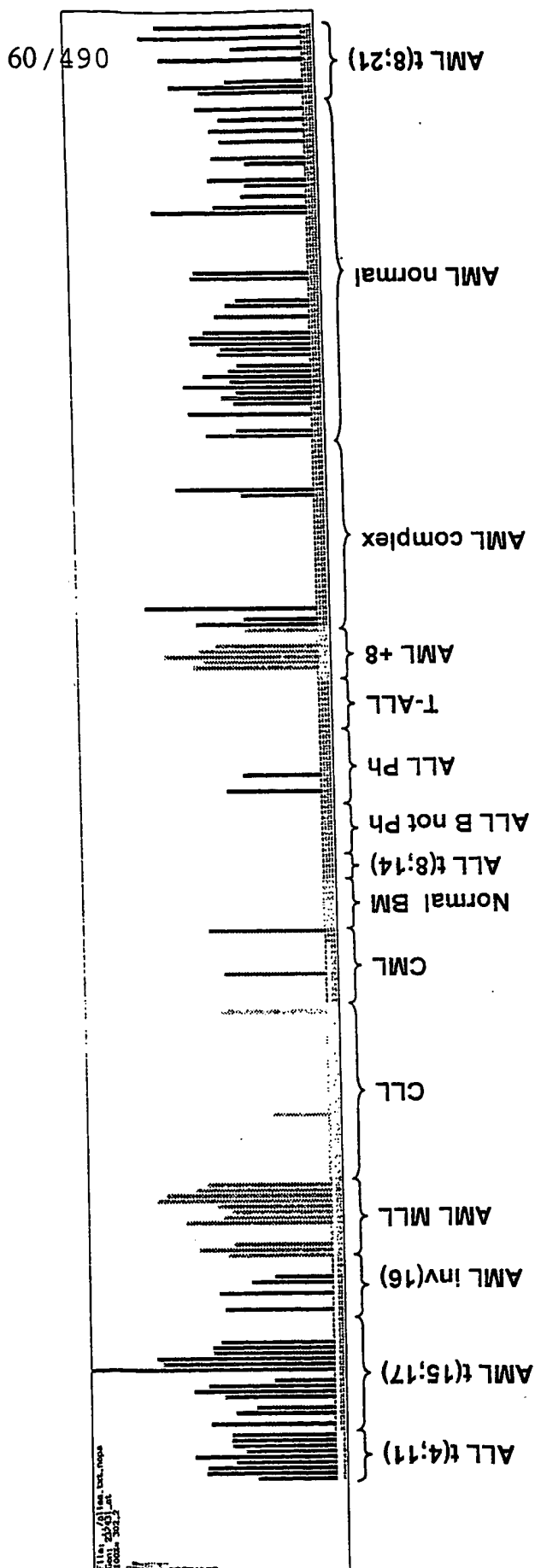


Figure 34



# 204069\_at, MEIS1, ALL t(4;11) vs. ALL Ph

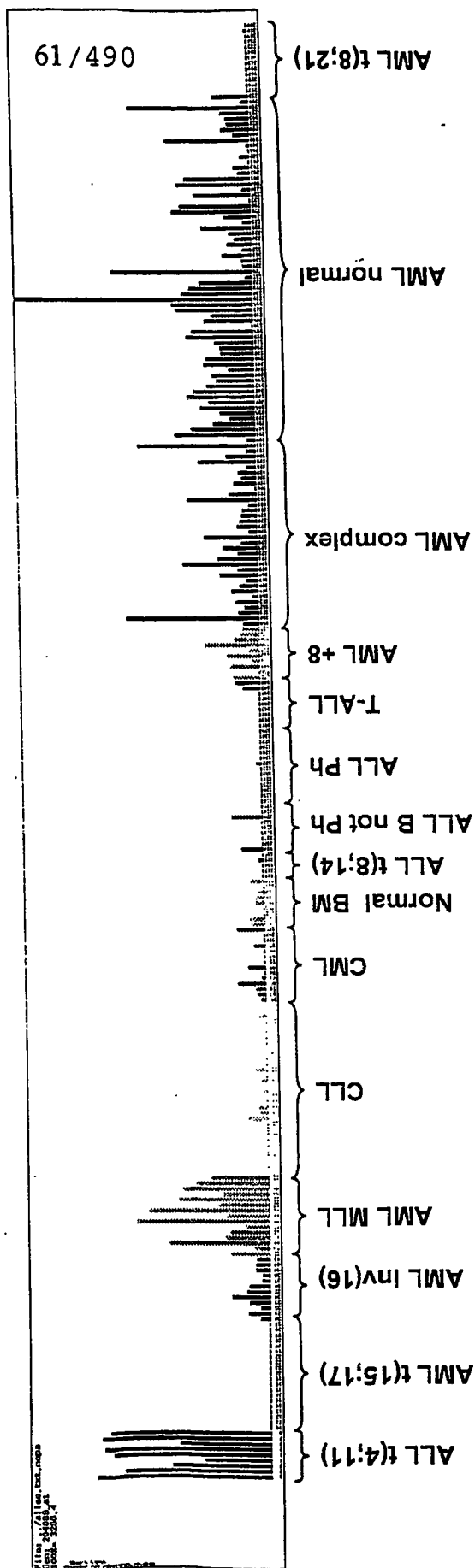


Figure 35

# 221969\_at, PAX5, ALL t(4;11) vs. T-ALL

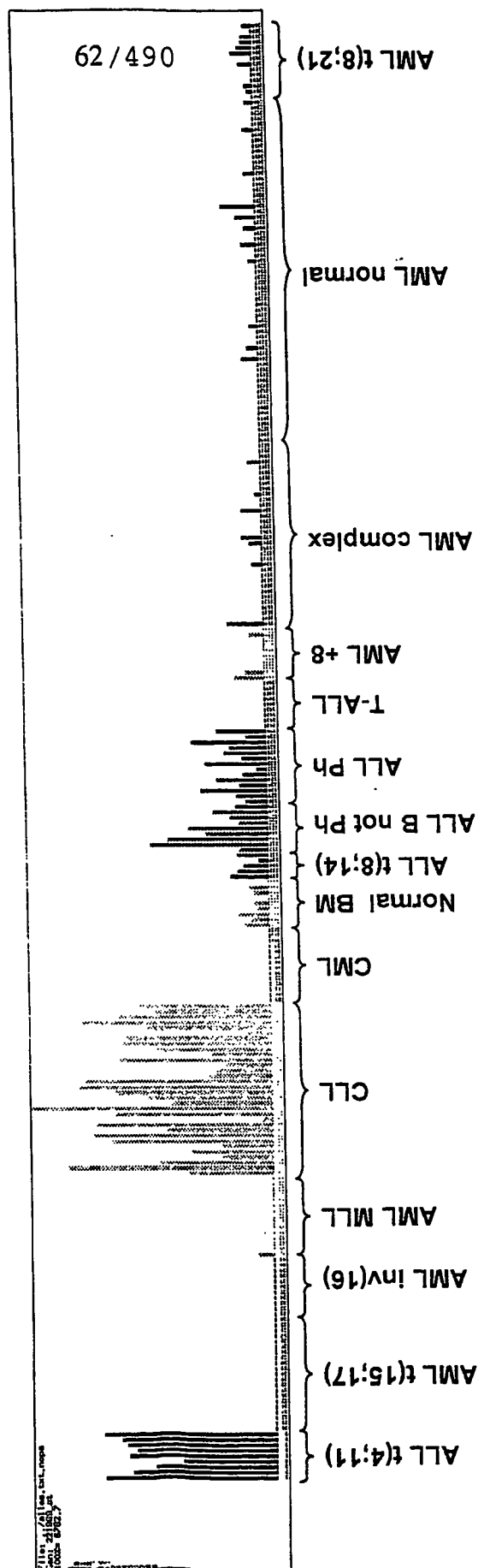


Figure 36

# 201828\_x\_at, CXX1, ALL t(4;11) vs. AML +8

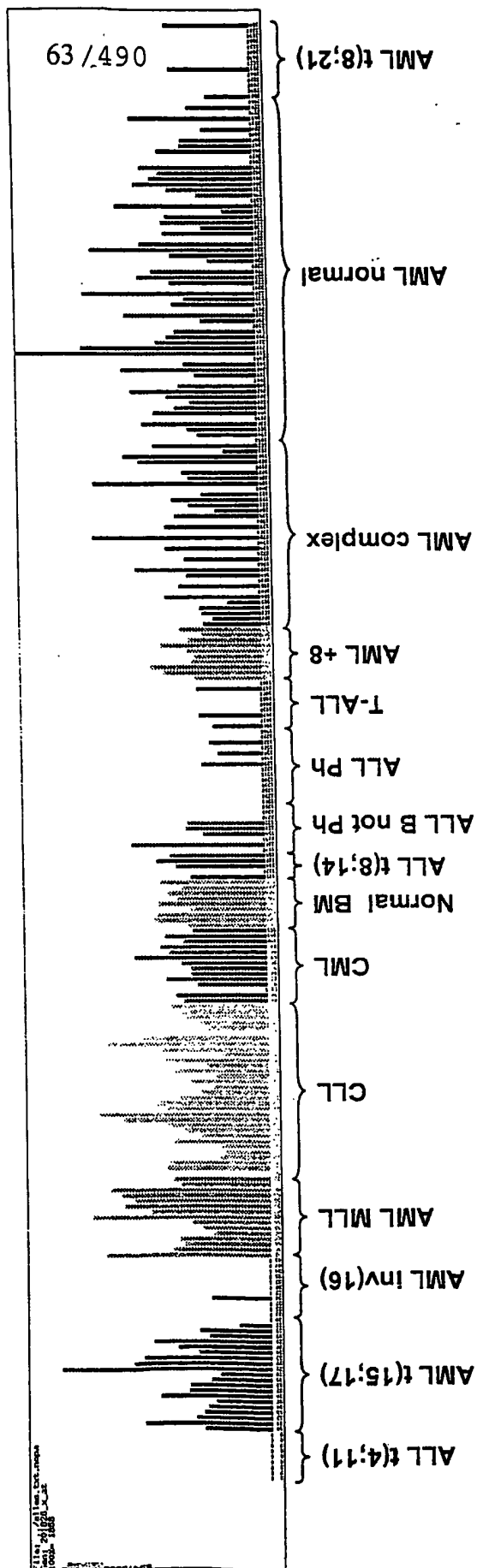


Figure 37

# 221969\_at, PAX5, ALL t(4;11) vs. AML complex

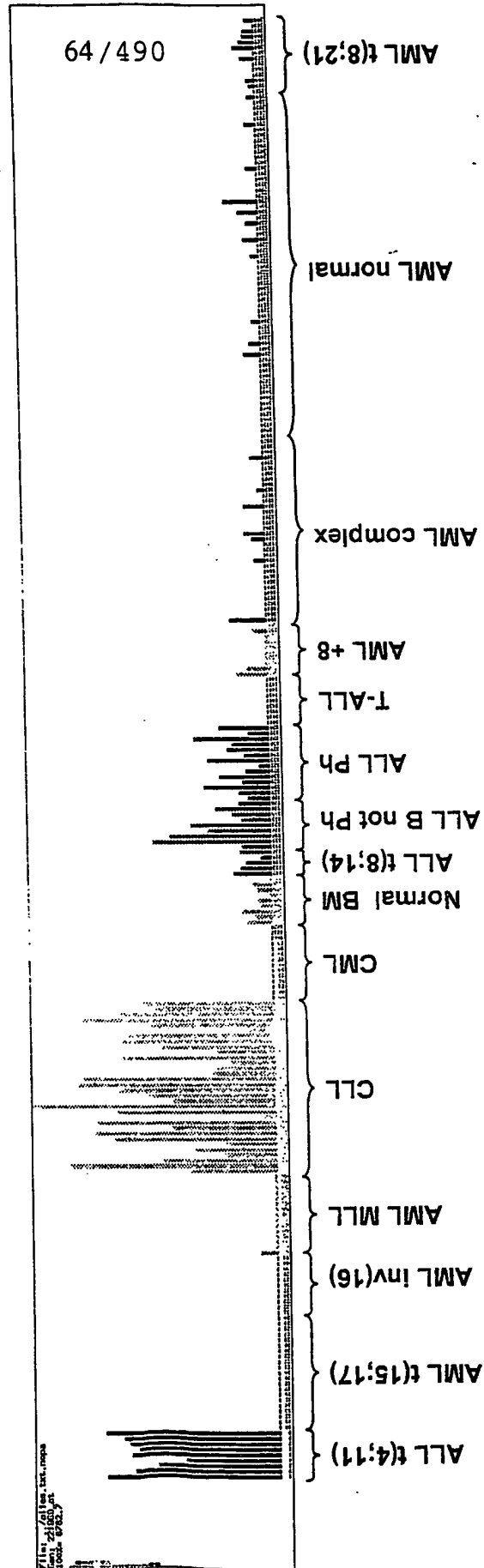


Figure 38

# 221969\_at, PAX5, ALL t(4;11) vs. AML normal

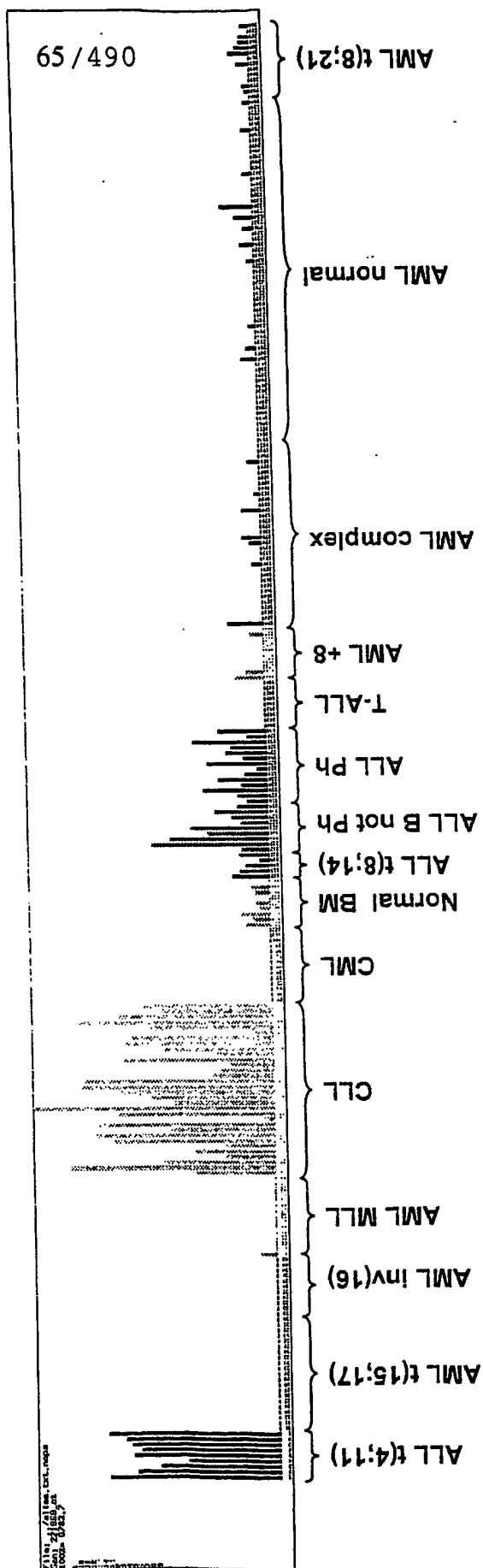


Figure 39

212484\_at, MTVR, ALL t(4;11) vs. AML t(8;21)

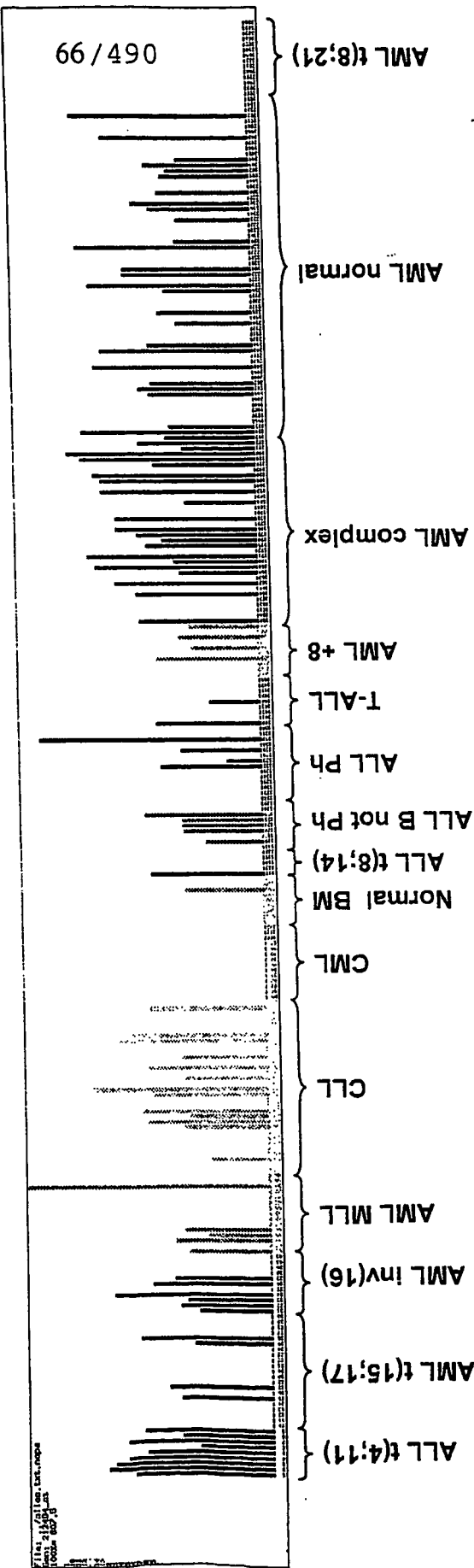


Figure 40

# 38487\_at, FLJ12442, AML t(15;17) vs. all others

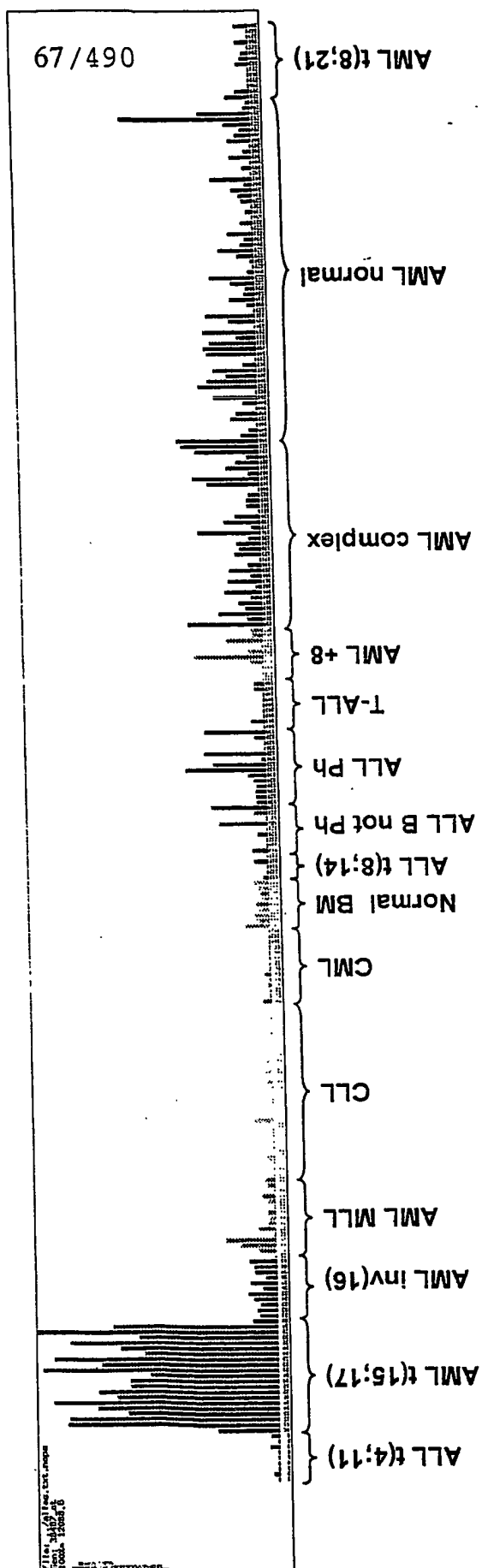


Figure 41

# 203948\_s\_at, MPO, AML t(15;17) vs. all others

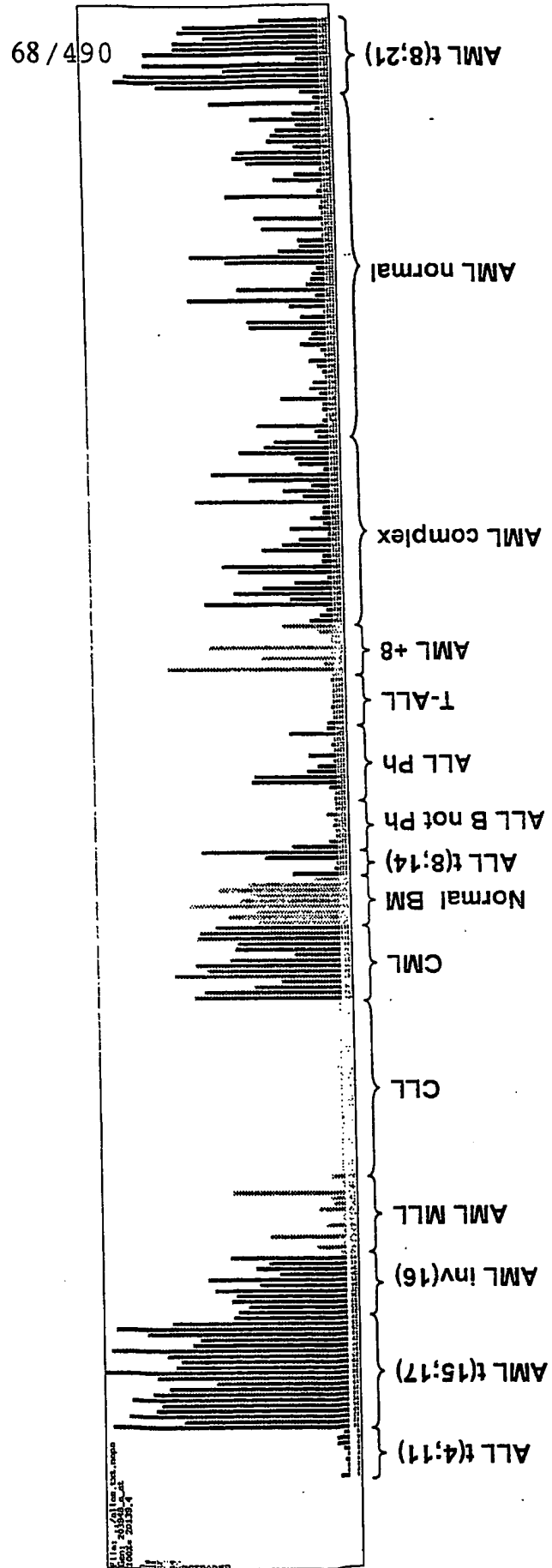


Figure 42



# 204661\_at, CDW52, AML t(15;17) vs. AML inv(16)

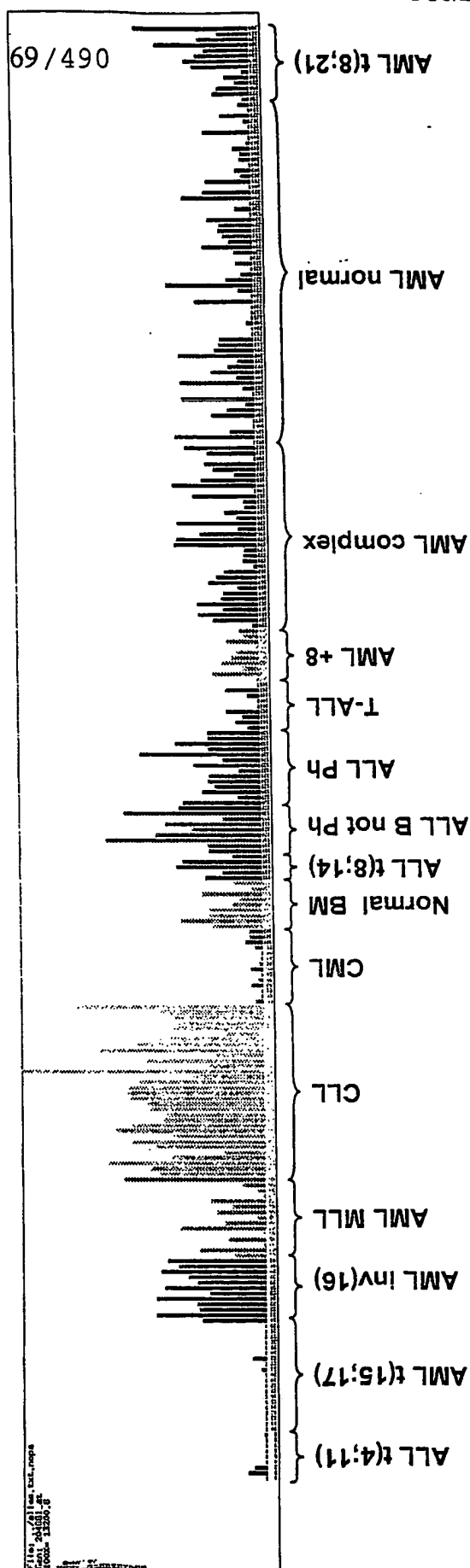


Figure 43

# 205624\_at, CPA3, AML t(15;17) vs. AML MLL

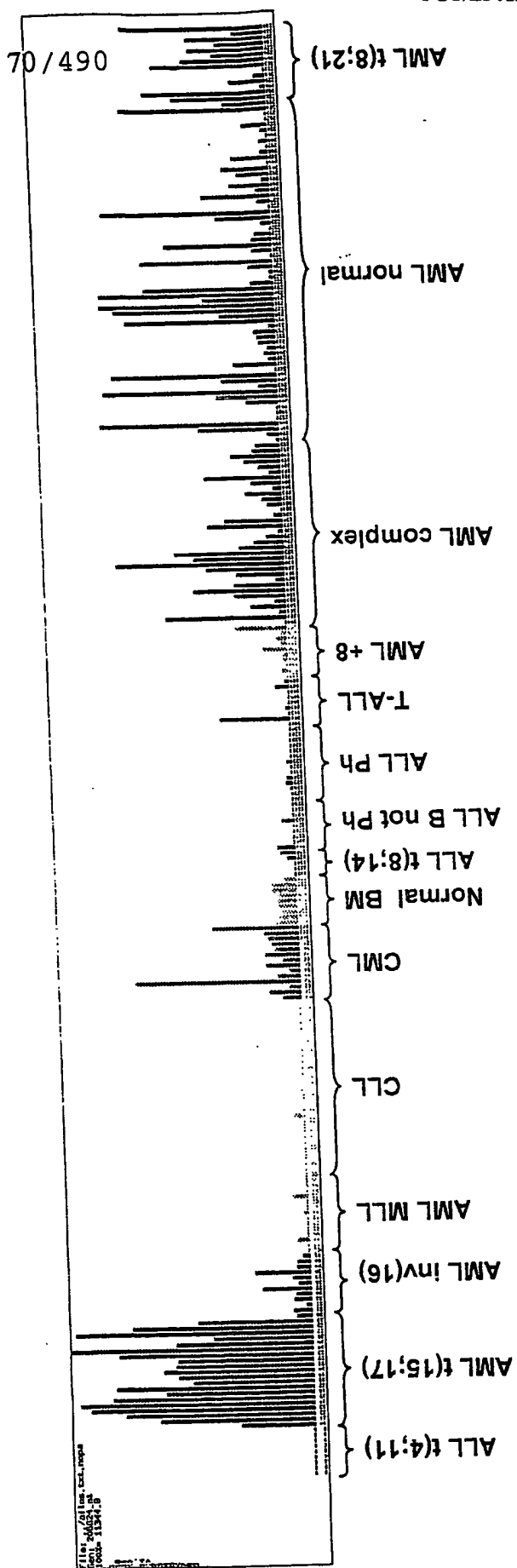
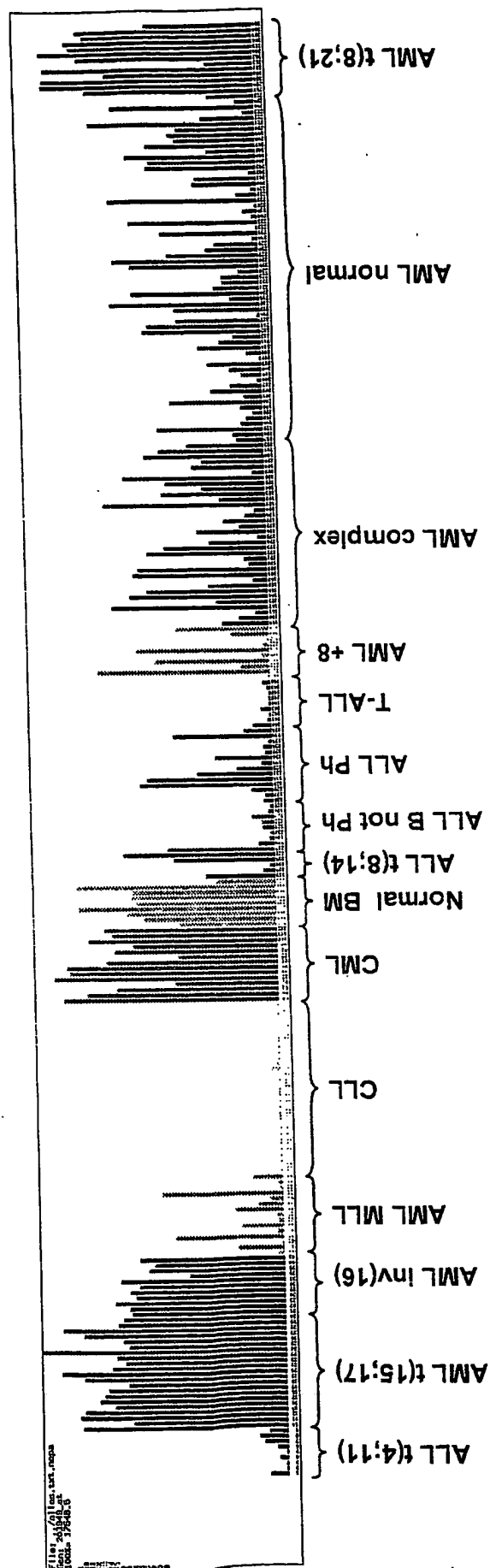


Figure 44

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Figure 45

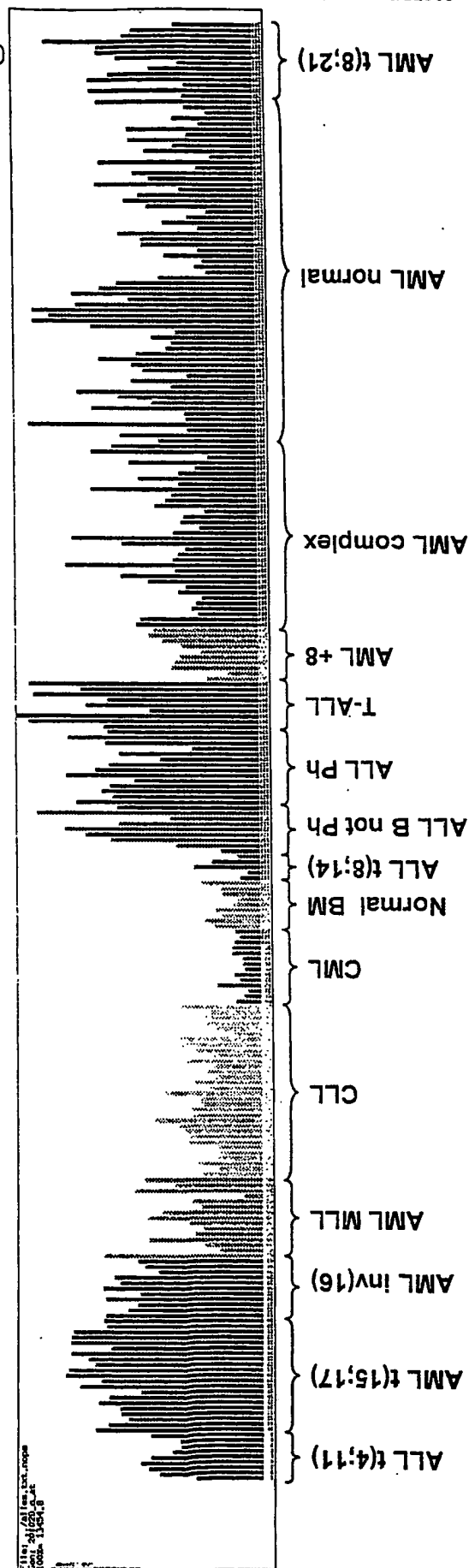
203949\_at, MPO, AML t(15;17) vs. CLL



# 201029\_s\_at, MIC2, AML t(15;17) vs. CML

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Figure 46



# 225792\_at, AML t(15;17) vs. normal BM

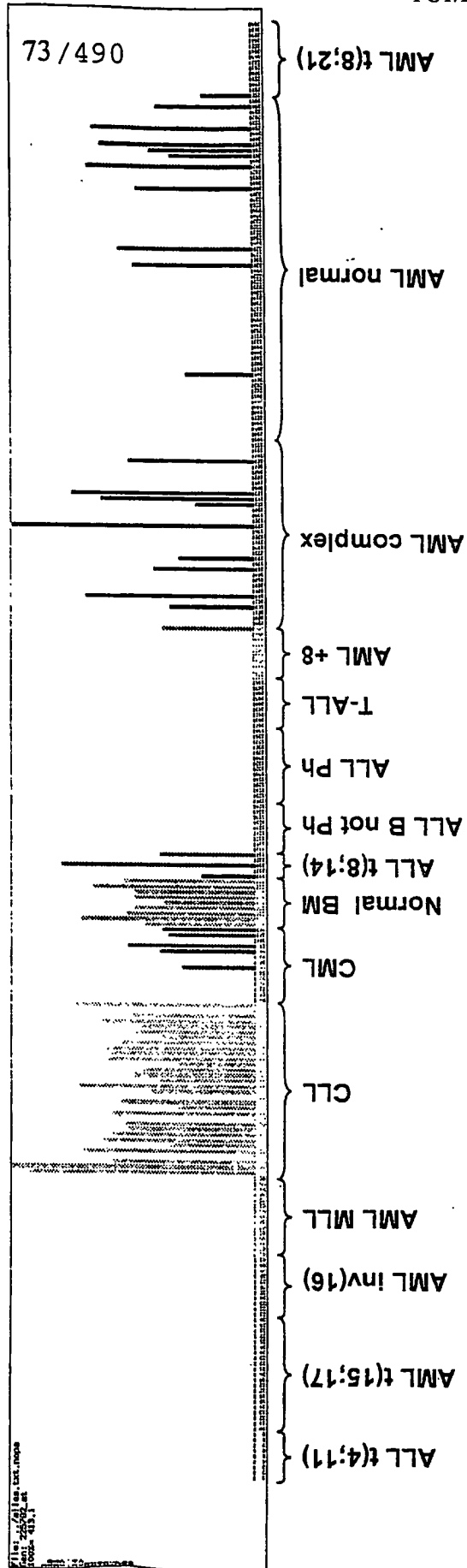


Figure 47

# 212400\_at, AML t(15;17) vs. ALL t(8;14)

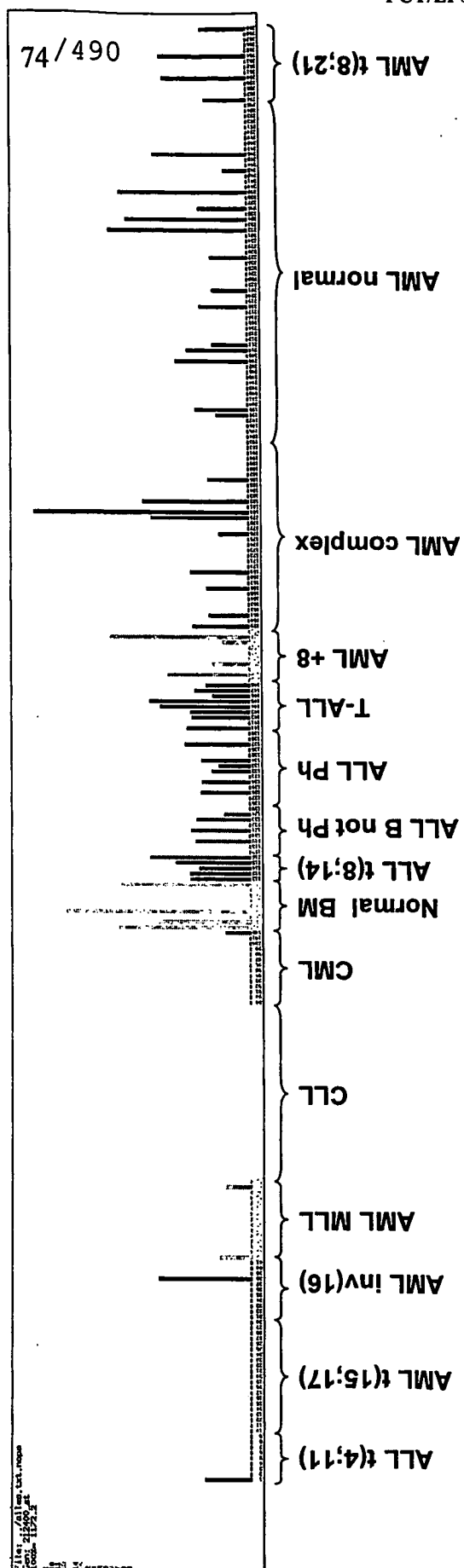
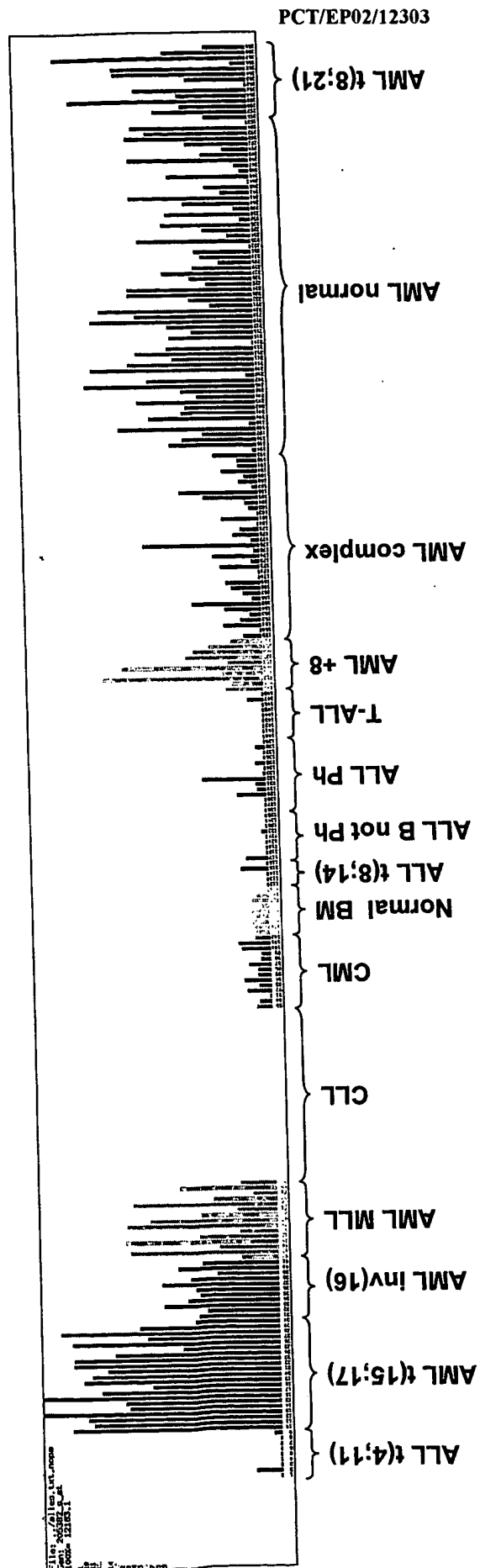


Figure 48

# 205382\_s\_at, DF, AML t(15;17) vs. ALL B not Ph

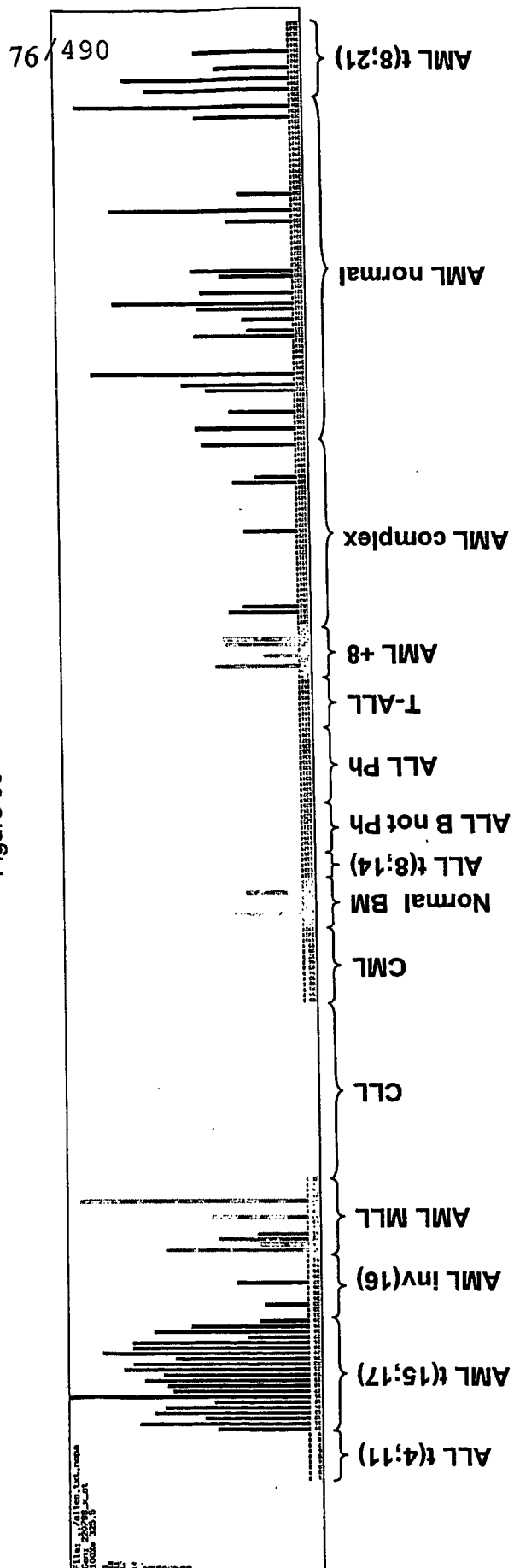
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Figure 49



# 220798\_x\_at, FLJ11535, AML t(15;17) vs. ALL Ph

Figure 50

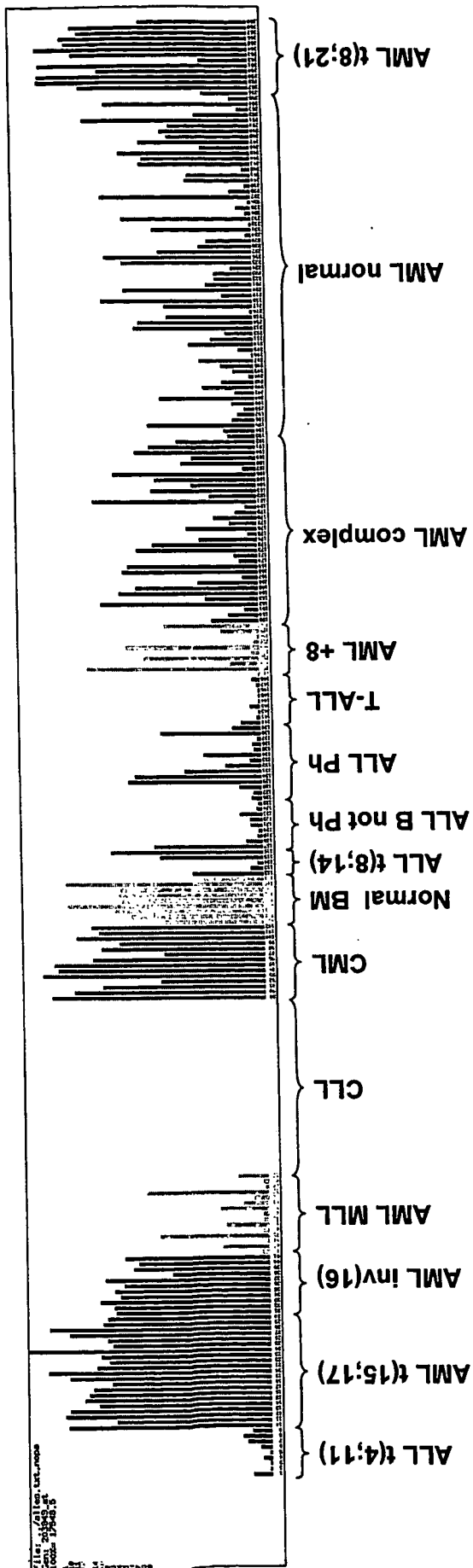




# 203949\_at, MPO, AML t(15;17) vs. T-ALL

Figure 51

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214450\_at, CTSW, AML t(15;17) vs. AML +8

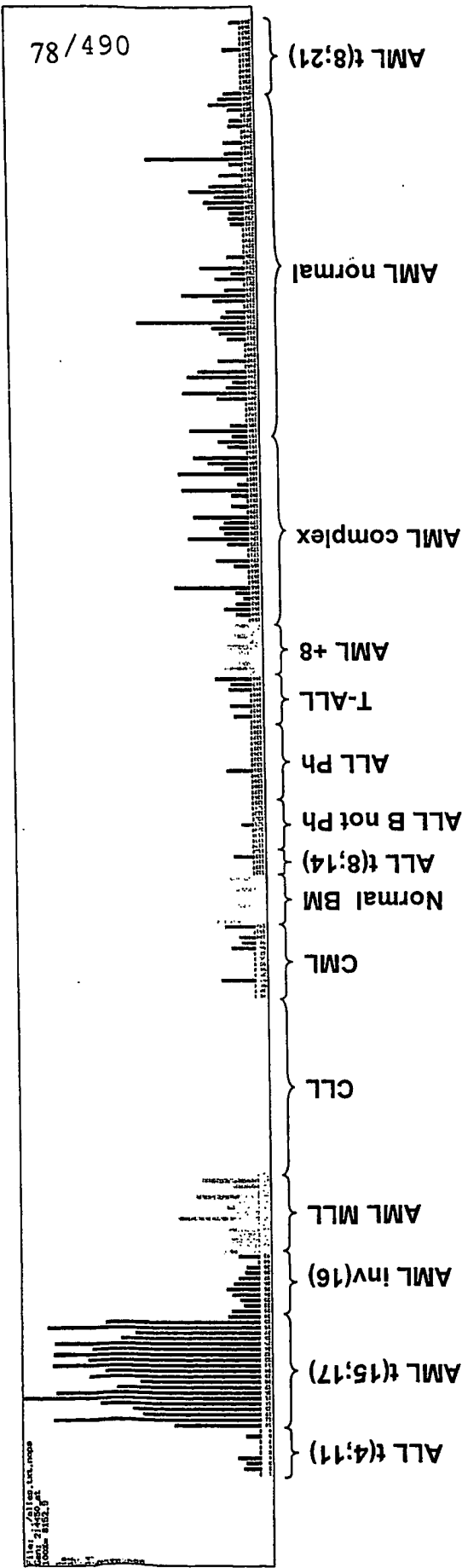
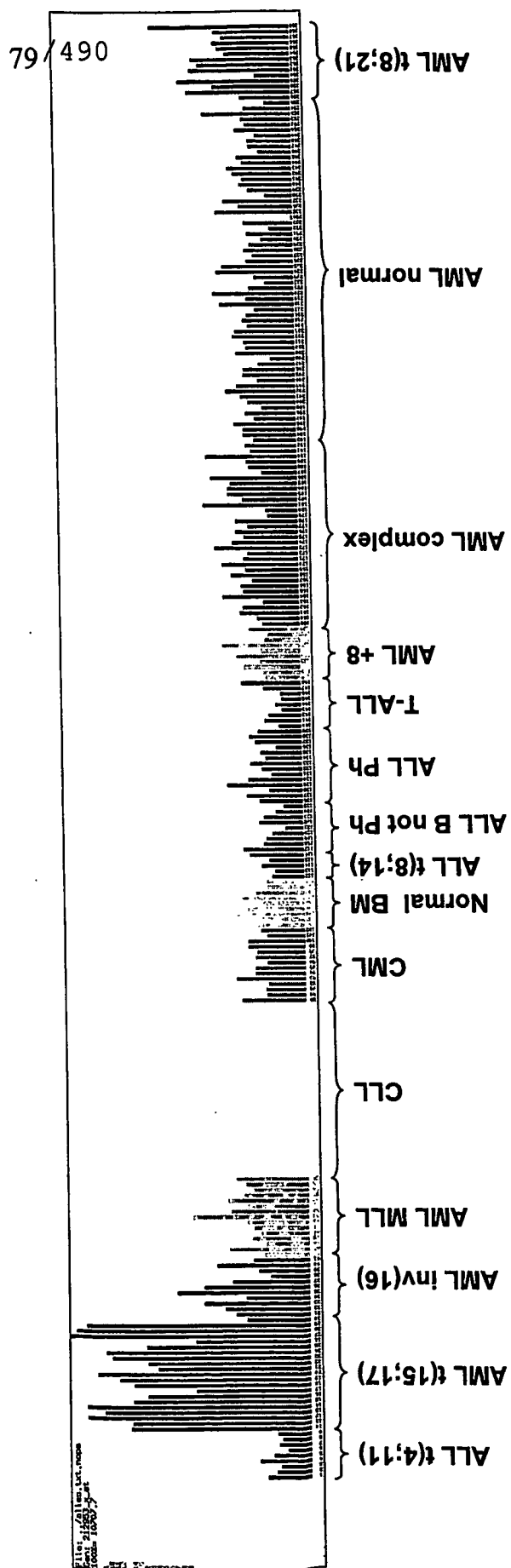


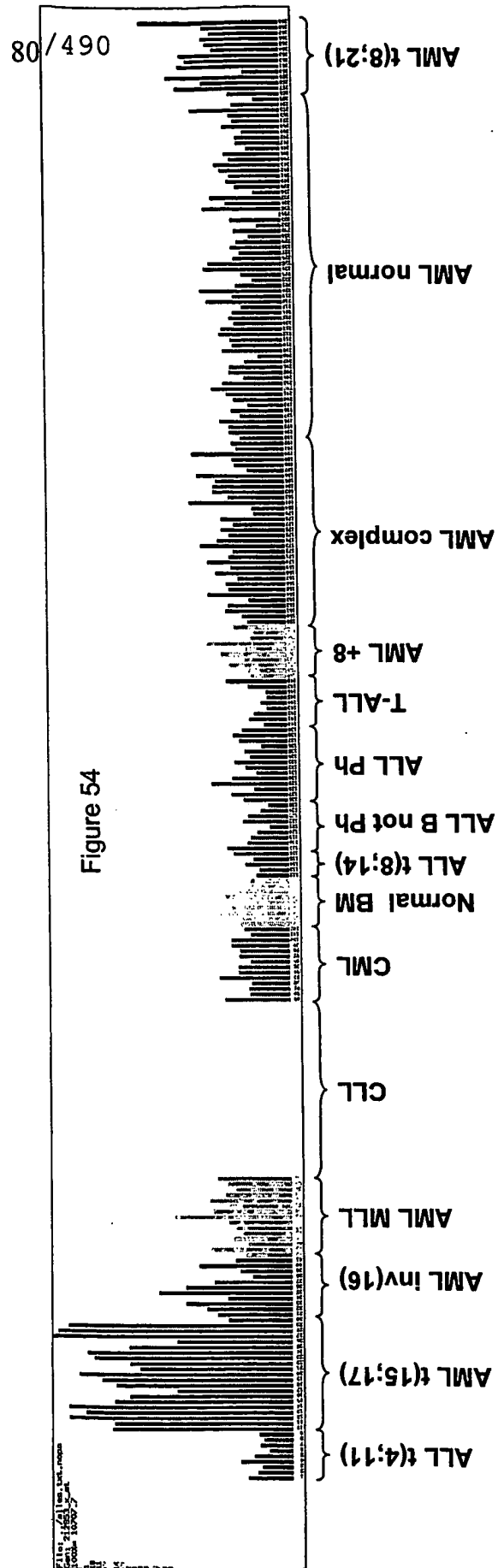
Figure 52

# 212953\_x\_at, CALR, AML t(15;17) vs. AML complex

Figure 53



# 212953\_x\_at, CALR, AML t(15;17) vs. AML normal



214450\_at, CTSW, AML t(15;17) vs. AML t(8;21)

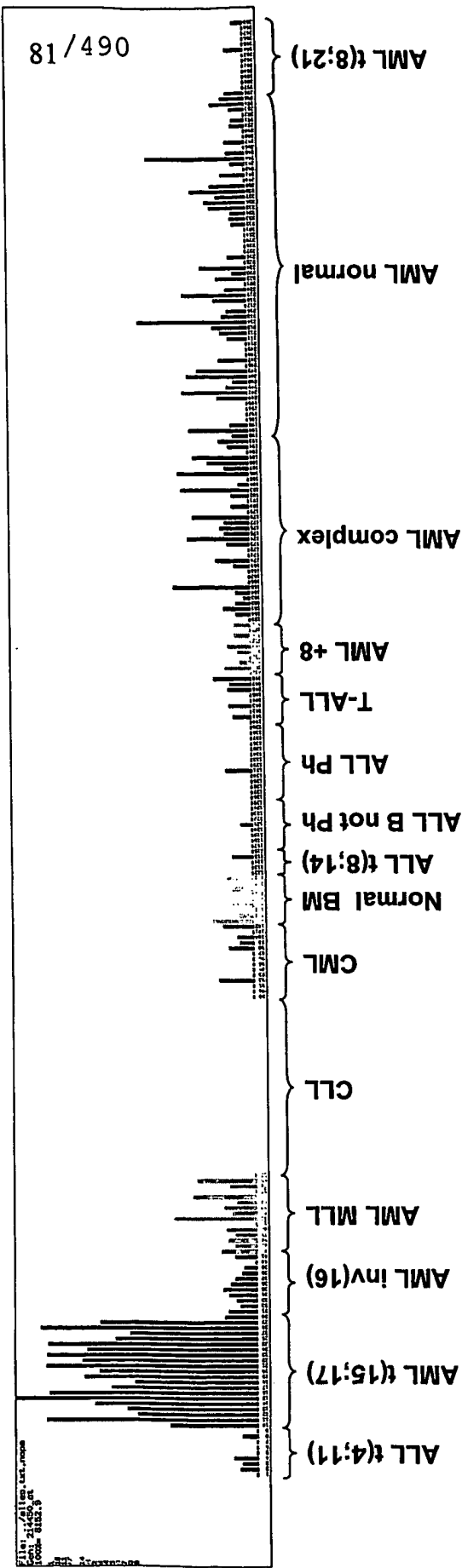


Figure 55

# 233555\_s\_at, AML inv(16) vs. all others

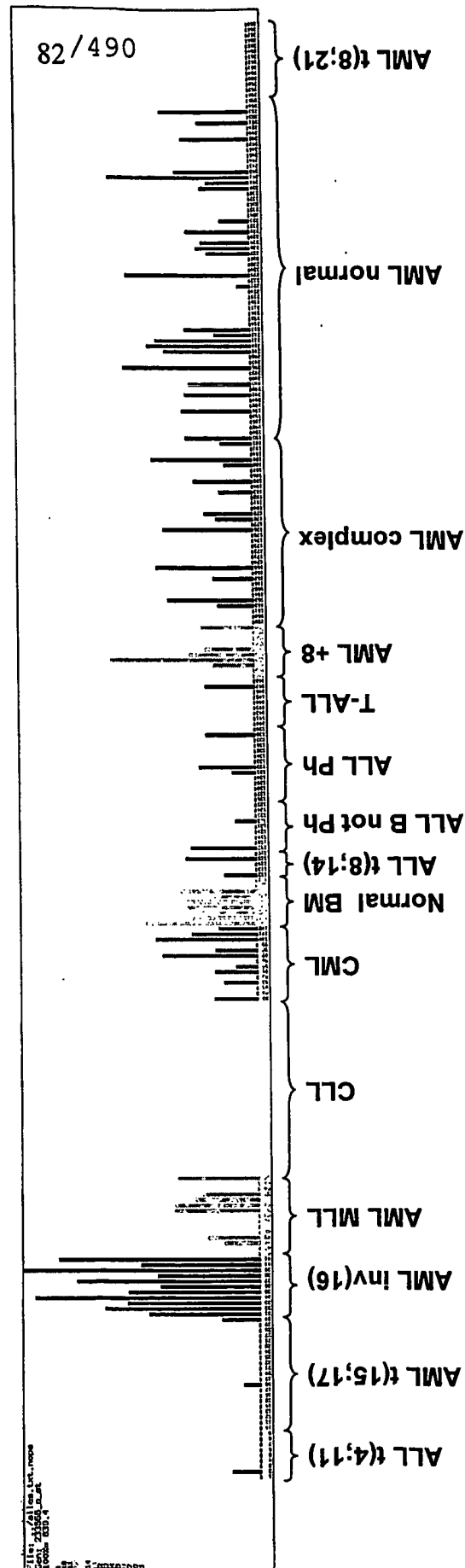


Figure 56

# 202016\_at, MEST, AML inv(16) vs. all others

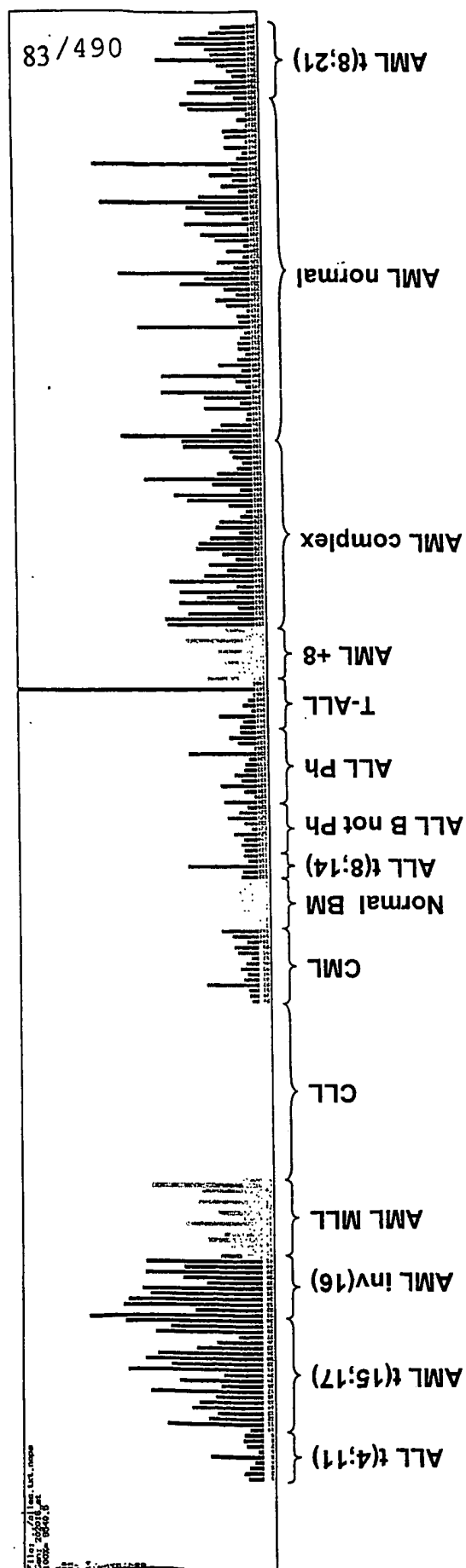


Figure 57

# 200951\_s\_at, CCND2, AML inv(16) vs. AML MLL

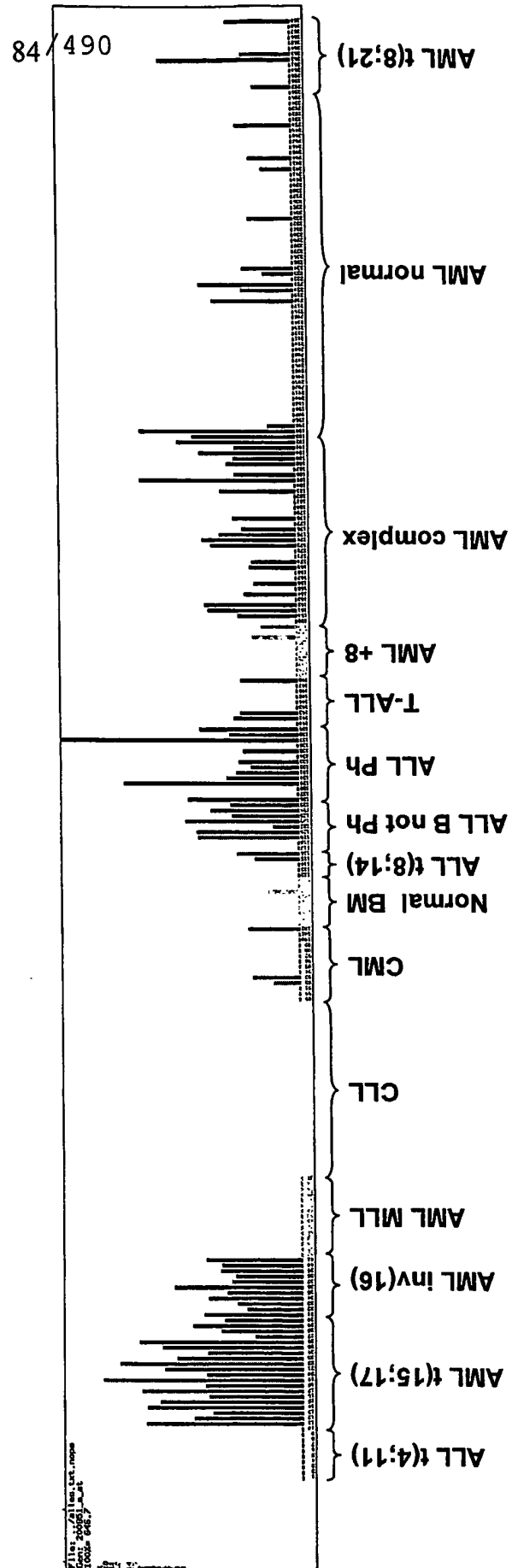


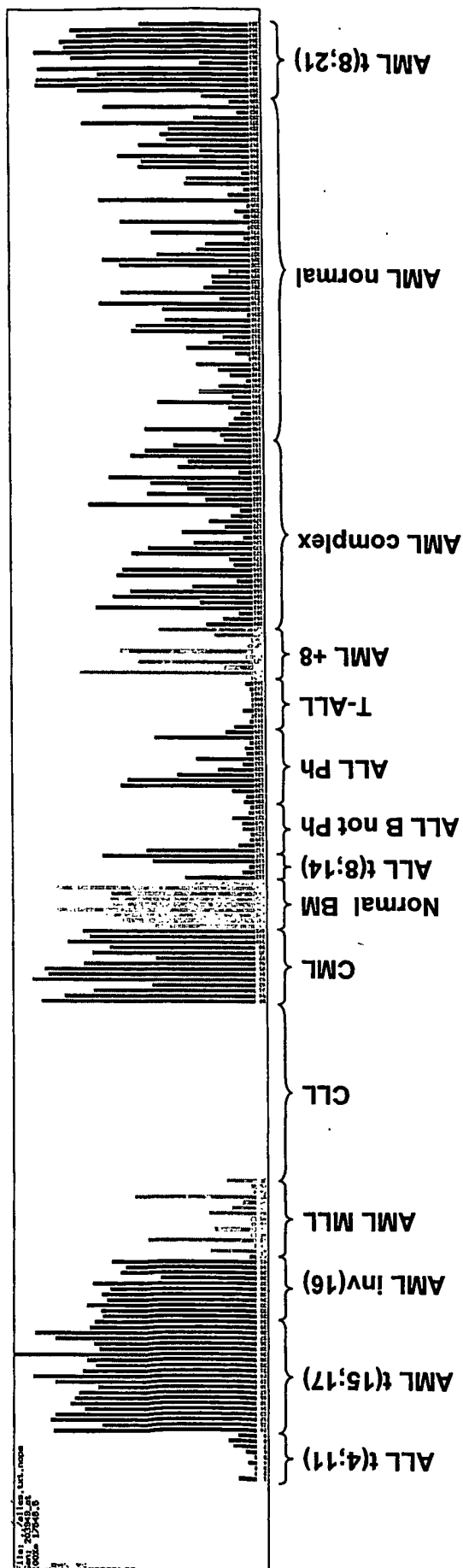
Figure 58



# 203949\_at, MPO, AML inv(16) vs. CLL

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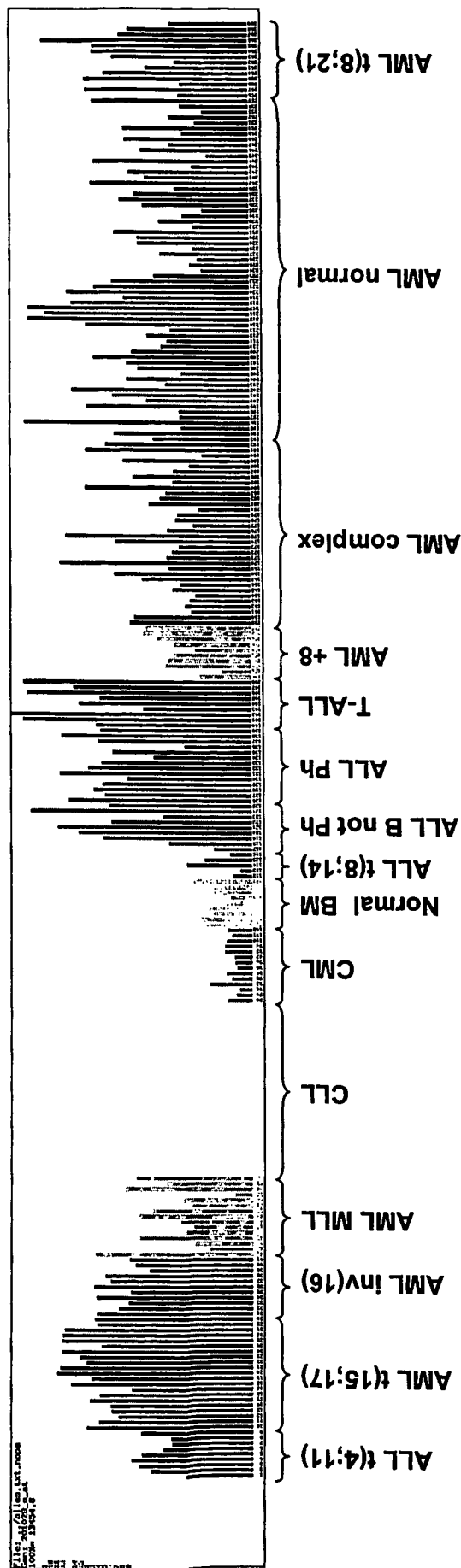
Figure 59



# 201029\_s\_at, MIC2, AML inv(16) vs. CML

Figure 60

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# 225792\_at, AML inv(16) vs. normales KM

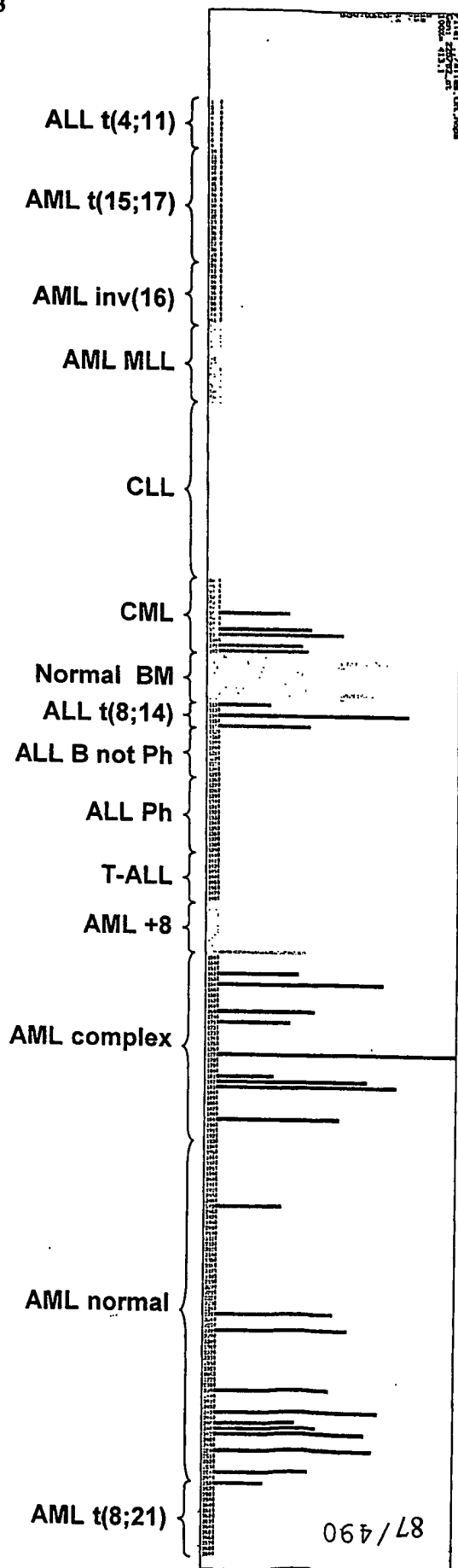
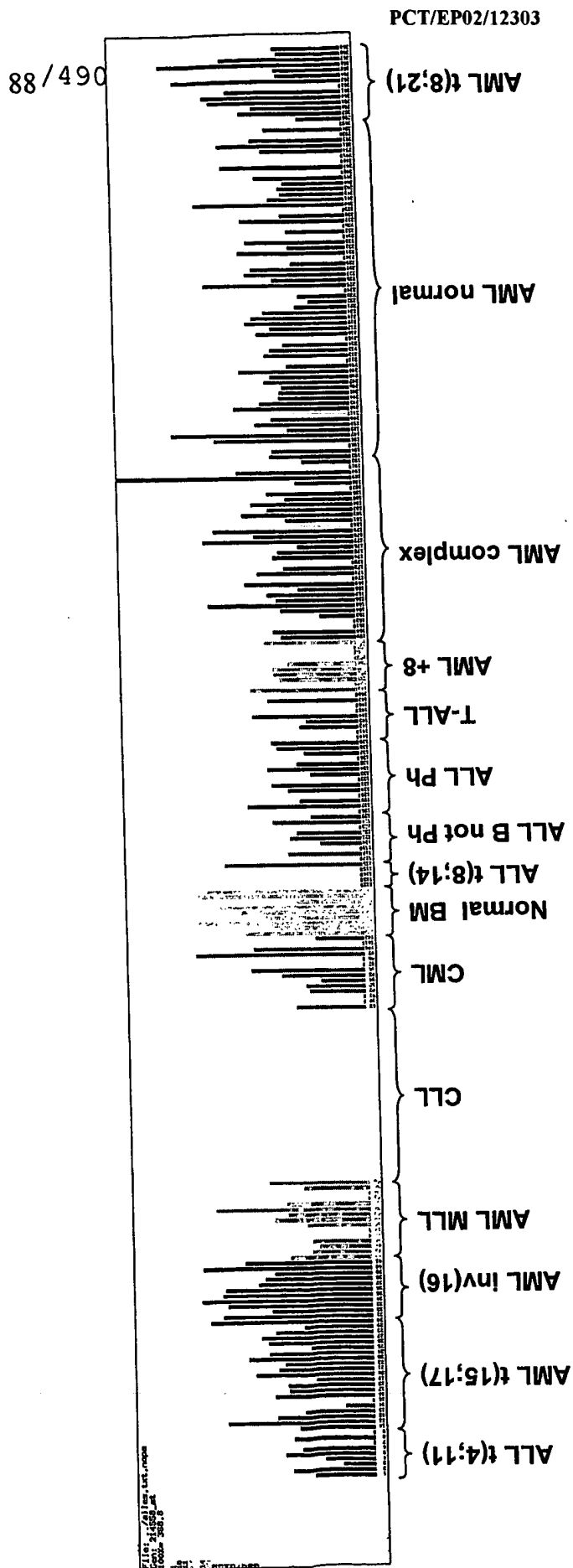


Figure 61

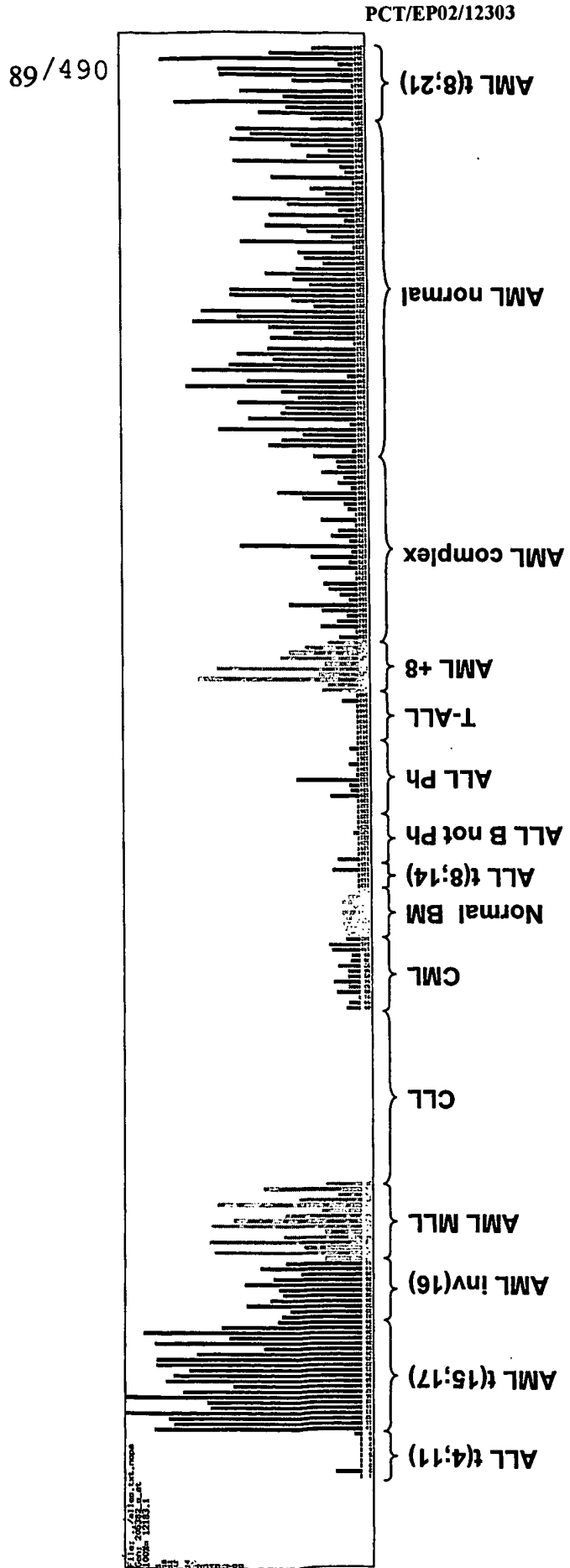
# 214558\_at, GPR12, AML inv(16) vs. ALL t(8;14)

Figure 62



# 205382\_s\_at, DF, AML inv(16) vs. ALL B not Ph

Figure 63



# 231310\_at, AML inv(16) vs. ALL Ph

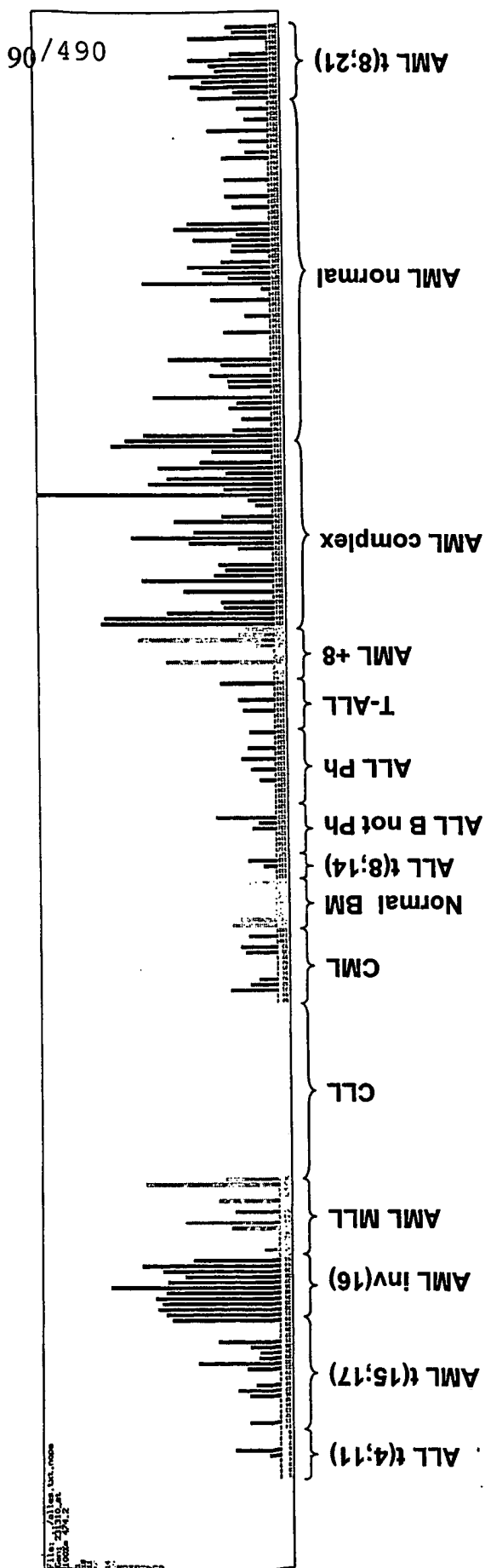
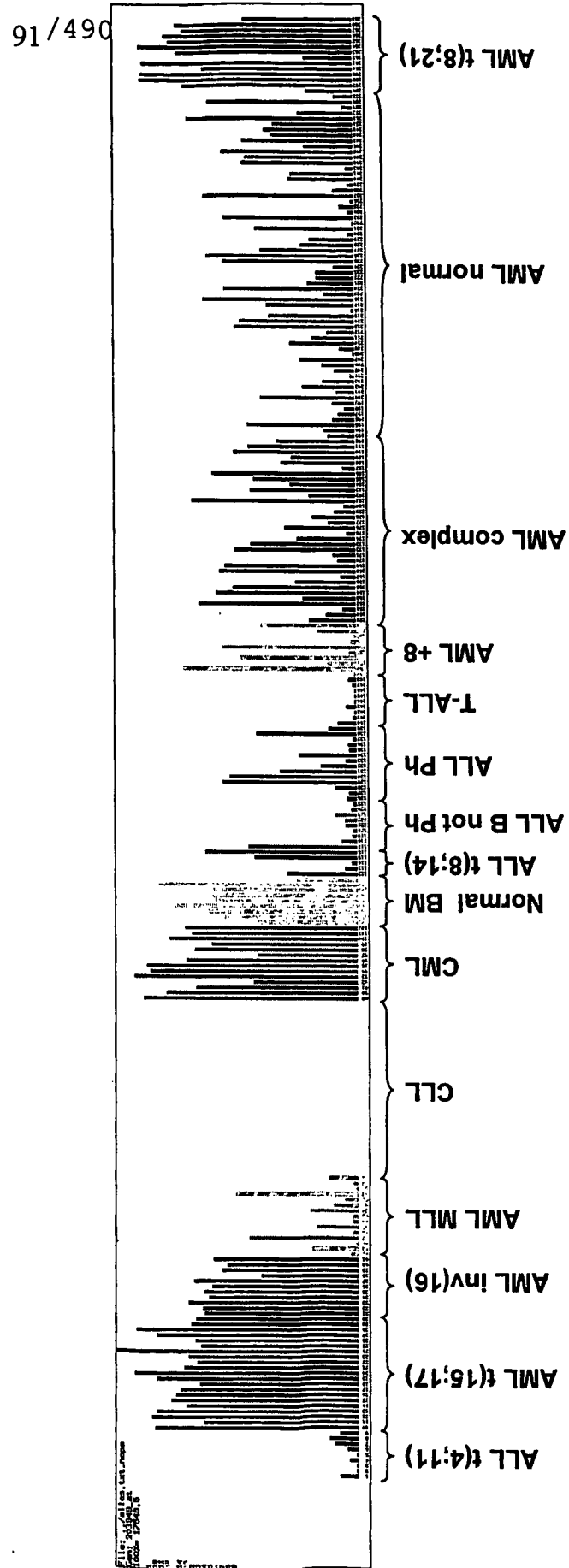


Figure 64

# 203949\_at, MPO, AML inv(16) vs. T-ALL

Figure 65



# 233138\_at, AML inv(16) vs. AML +8

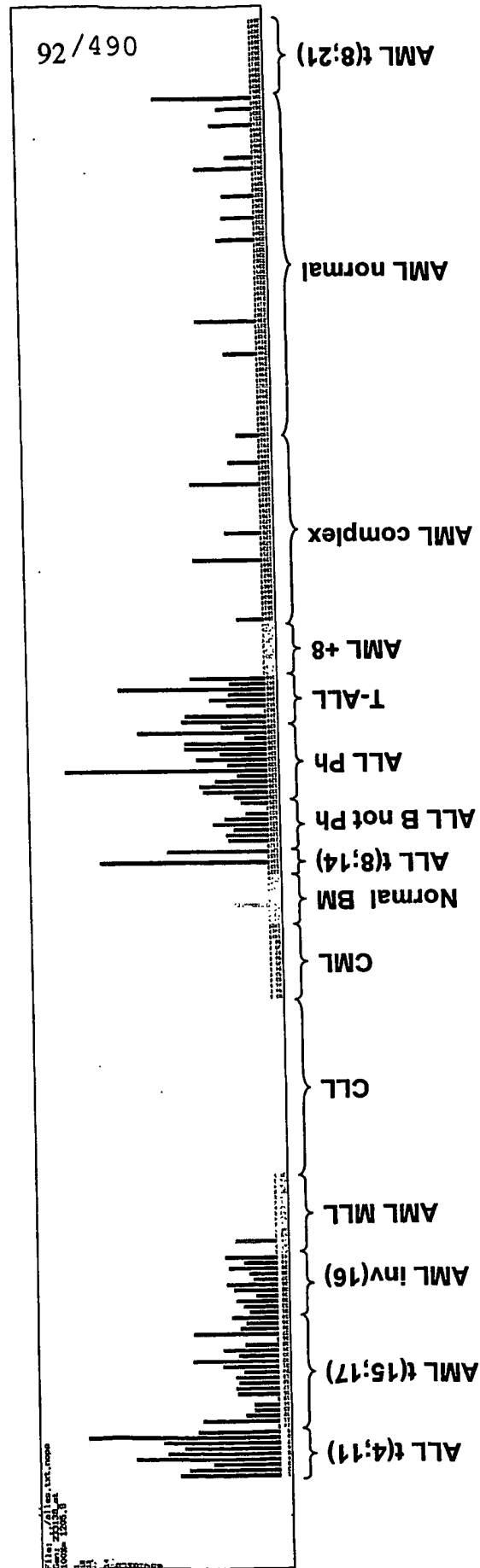


Figure 66



# 209190\_s\_at, DIAPH1, AML inv(16) vs. AML complex

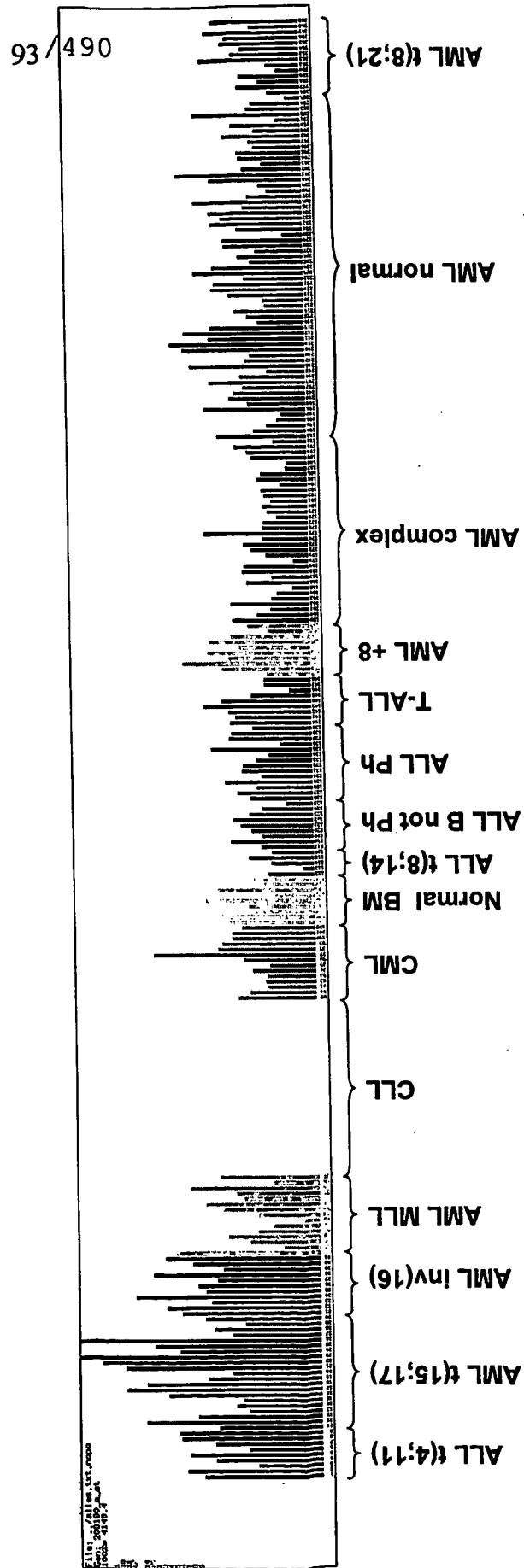


Figure 67

201497\_x\_at, MYH11, AML inv(16) vs. AML complex

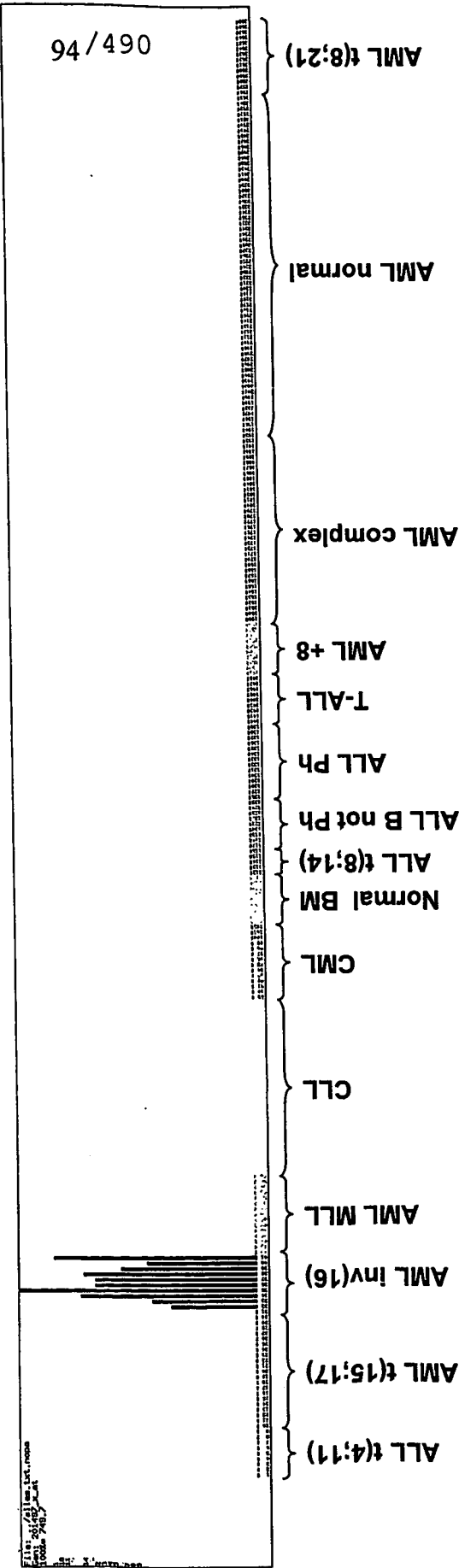
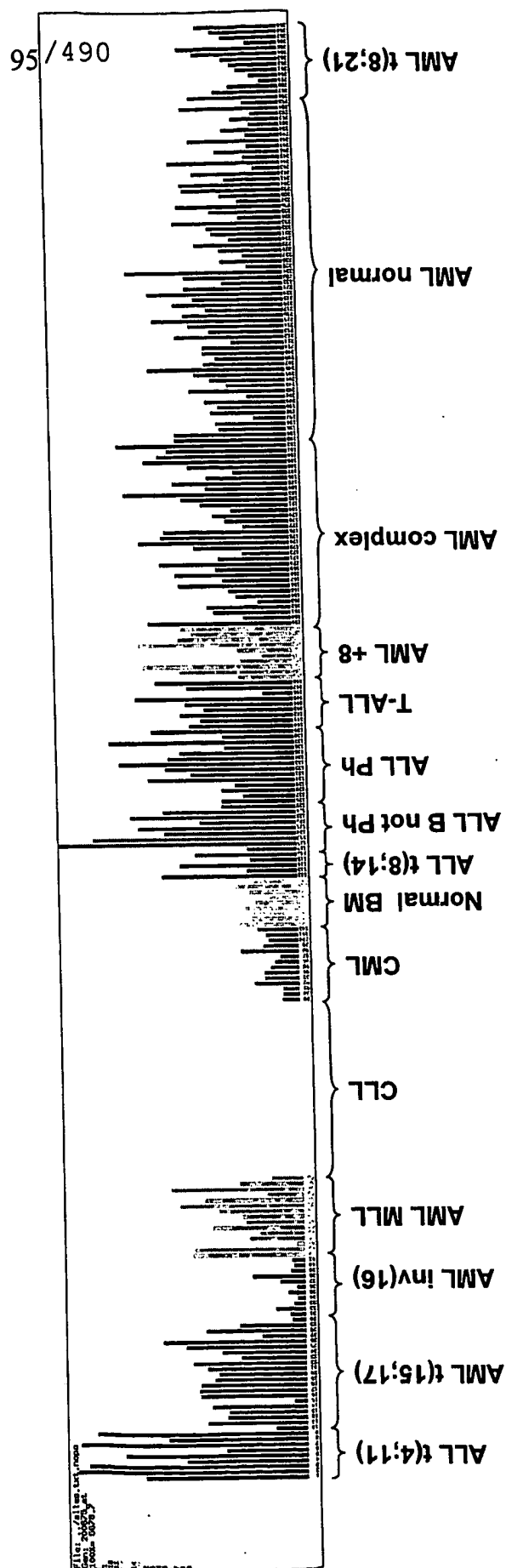


Figure 68

# 200675\_at, CD81, AML inv(16) vs. AML complex

Figure 69



209365\_s\_at, ECM1, AML inv(16) vs. AML normal

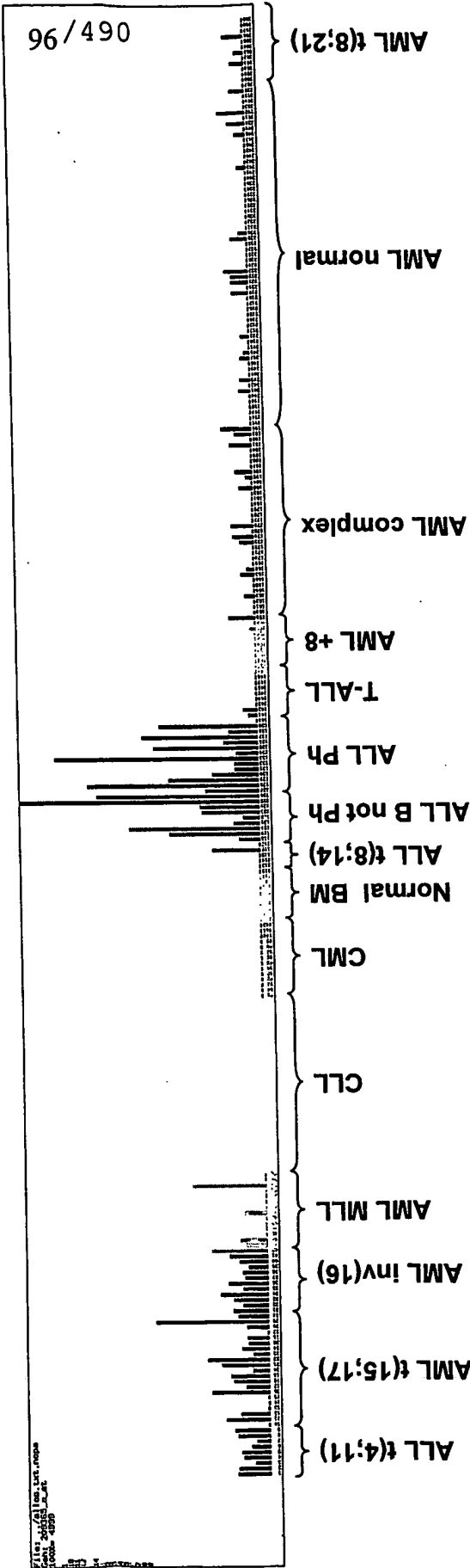


Figure 70

# 214641\_s\_at, HOXA9, AML inv(16) vs. AML normal

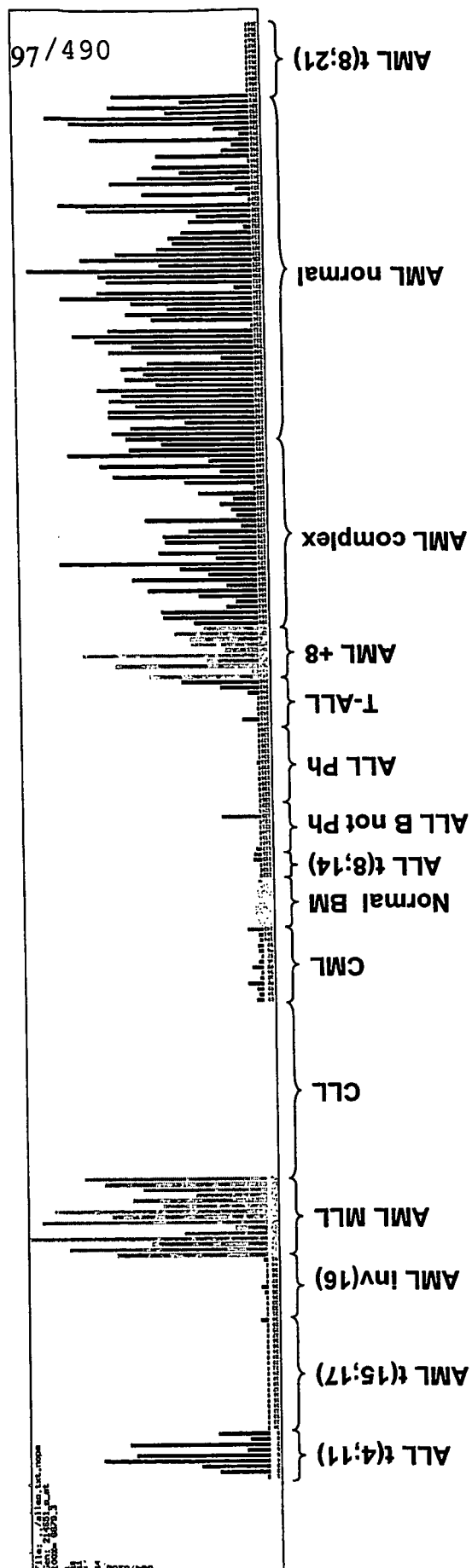


Figure 71

# 231310\_at, AML inv(16) vs. AML normal

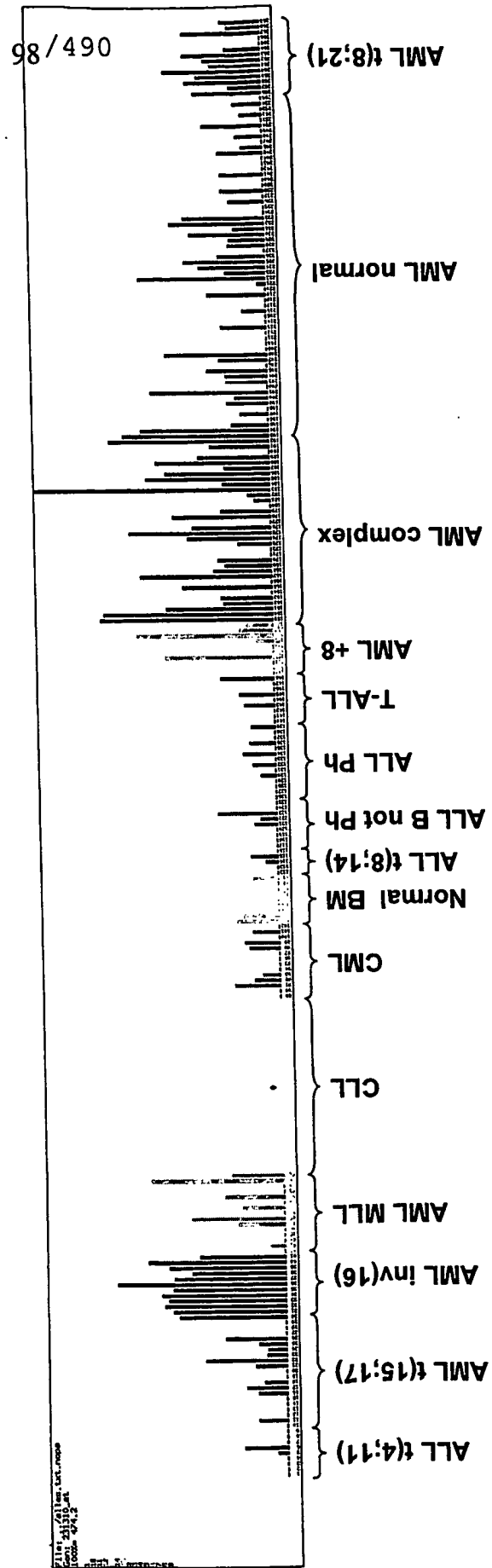


Figure 72

# 233138\_at, AML inv(16) vs. AML t(8;21)

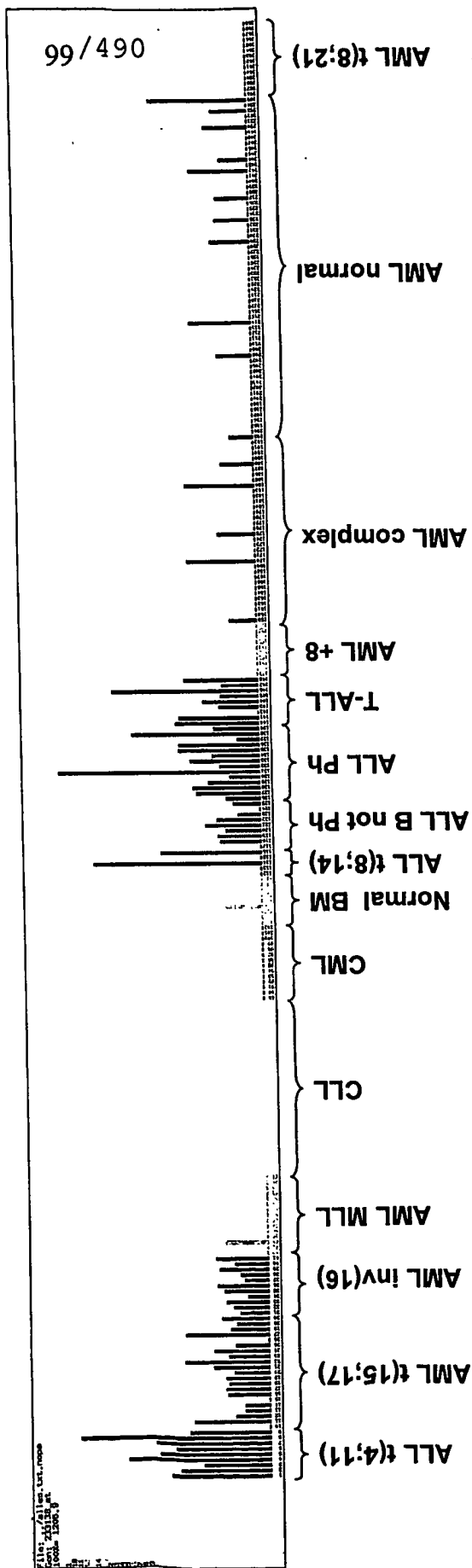


Figure 73

201105\_at, LGALS1, AML MLL vs. all others

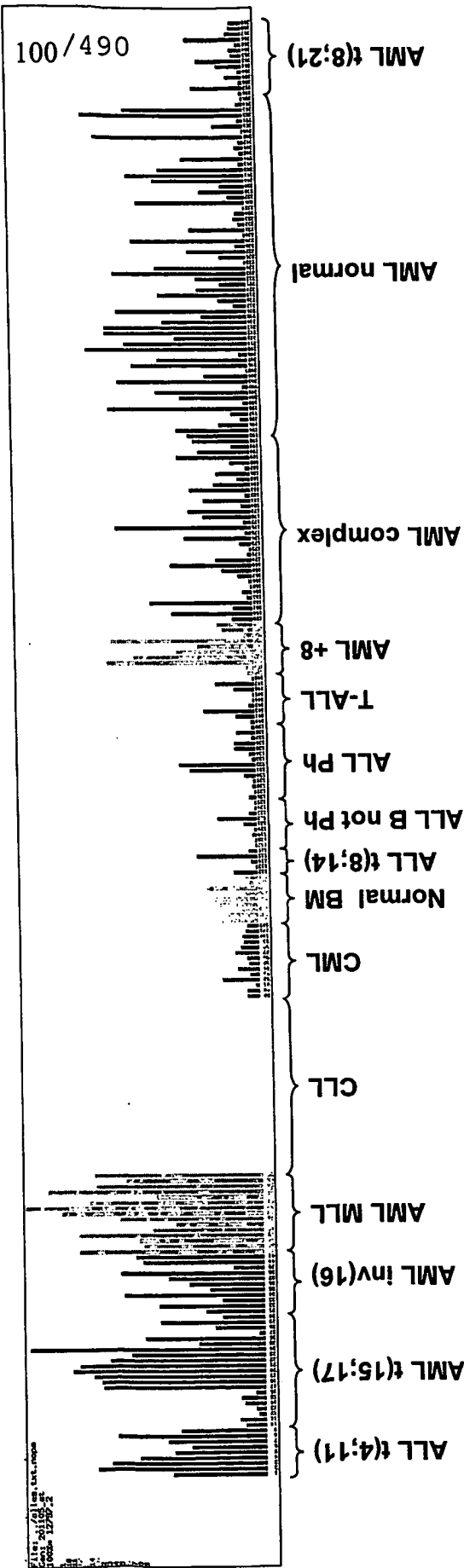
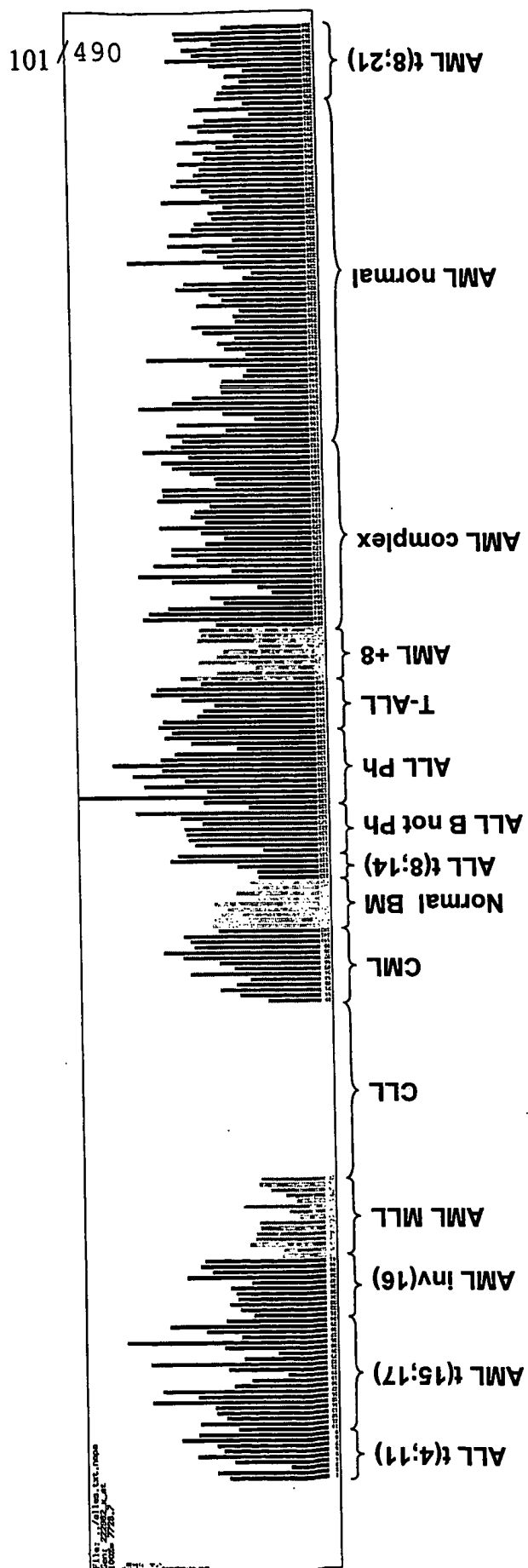


Figure 74



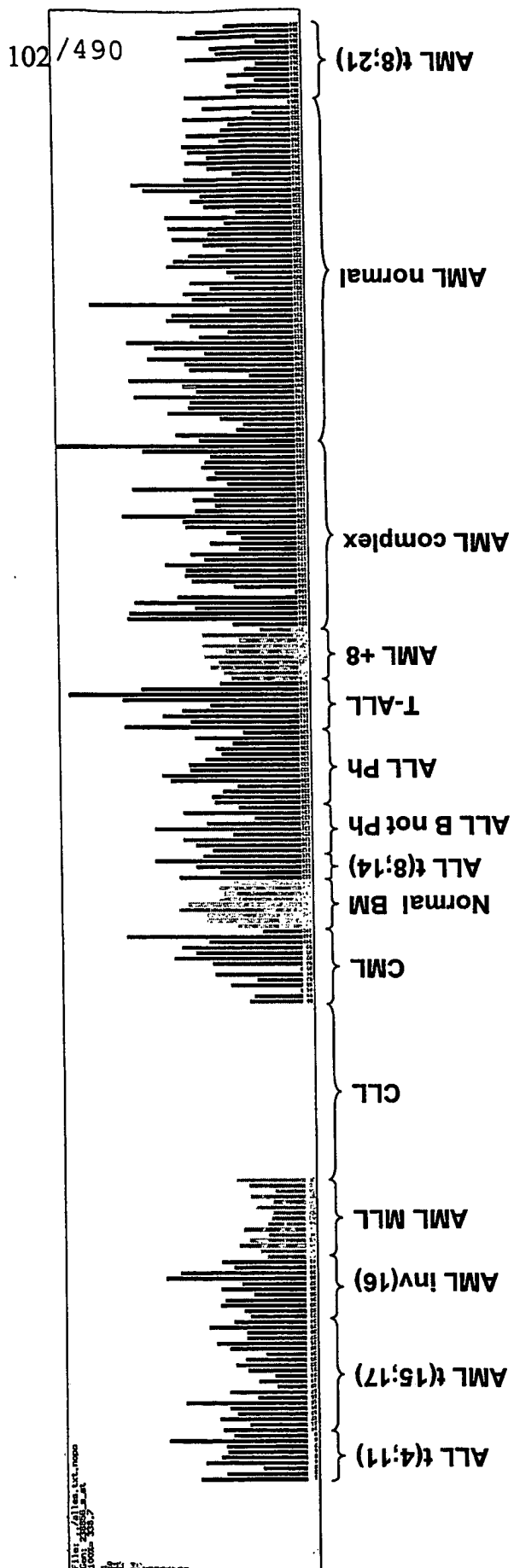
# 222982\_x\_at, SLC38A2, AML MLL vs. all others

Figure 75



# 238856\_s\_at, AML MLL vs. all others

Figure 76



# 224838\_at, AML MLL vs. CLL

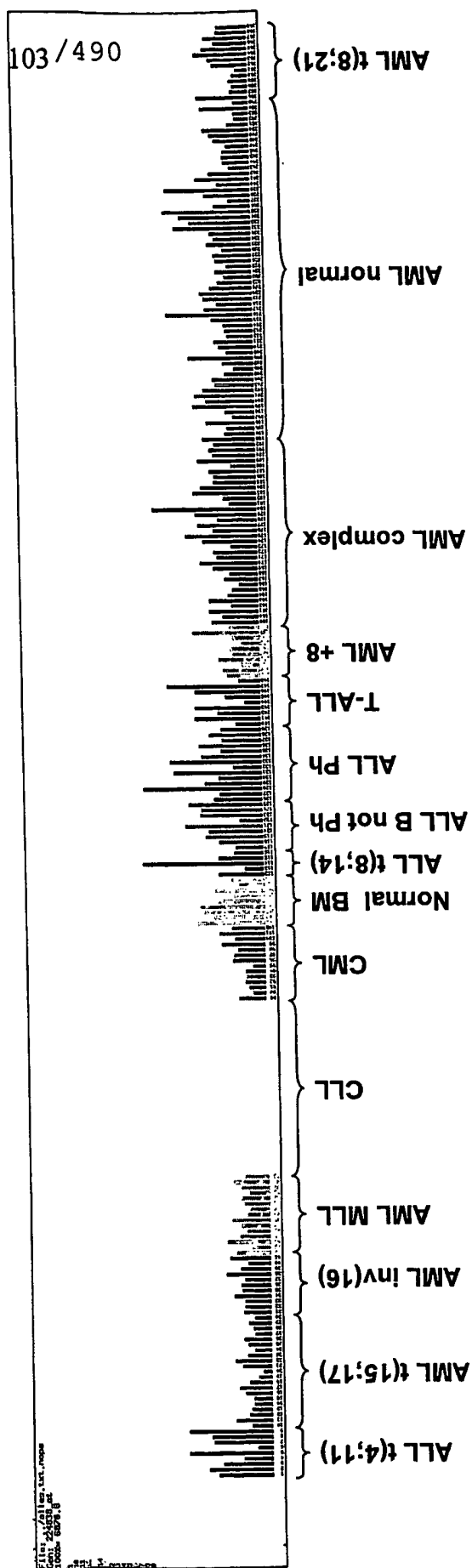
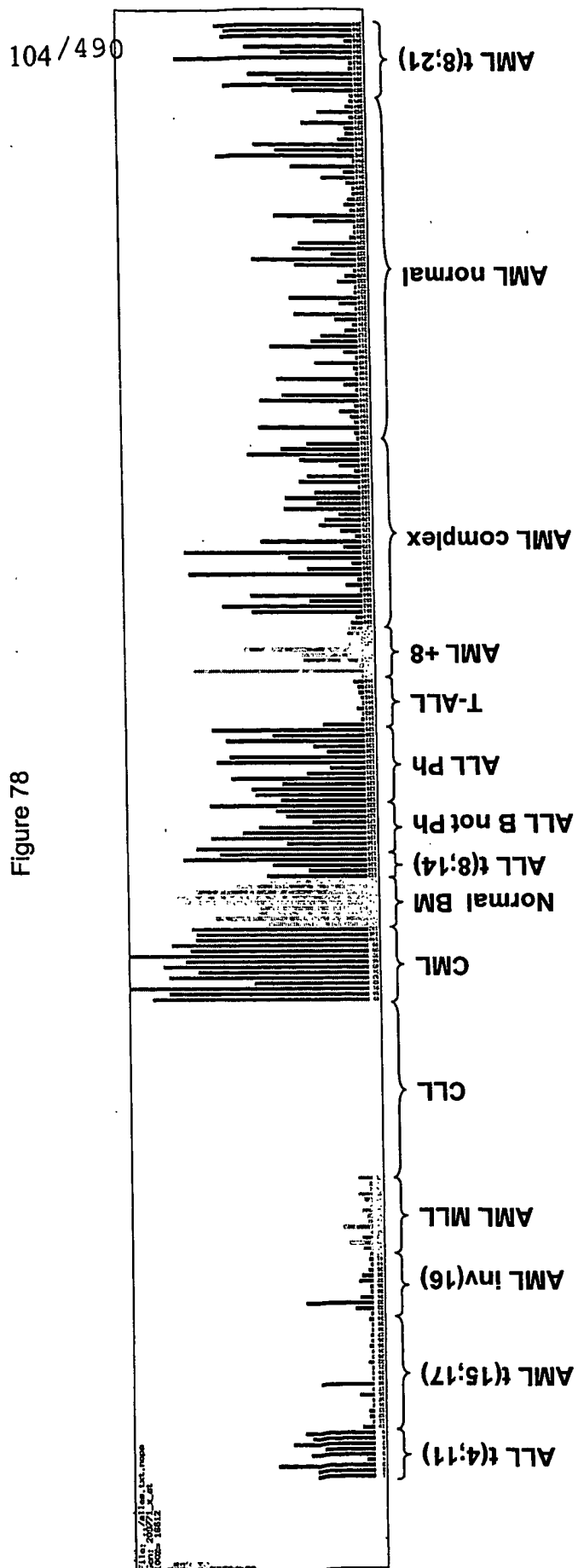


Figure 77

# 209771\_x\_at, CD24, AML MLL vs. CML

Figure 78



225792\_at, AML MLL vs. normal BM

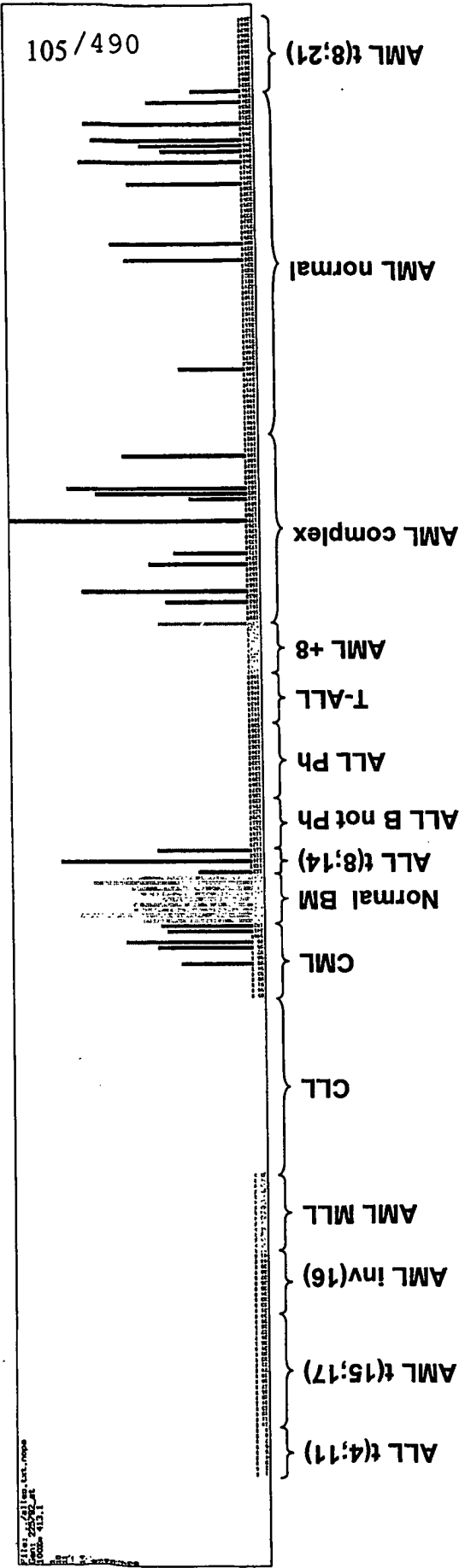


Figure 79

# 227173\_s\_at, BACH2, AML MLL vs. ALL t(8;14)

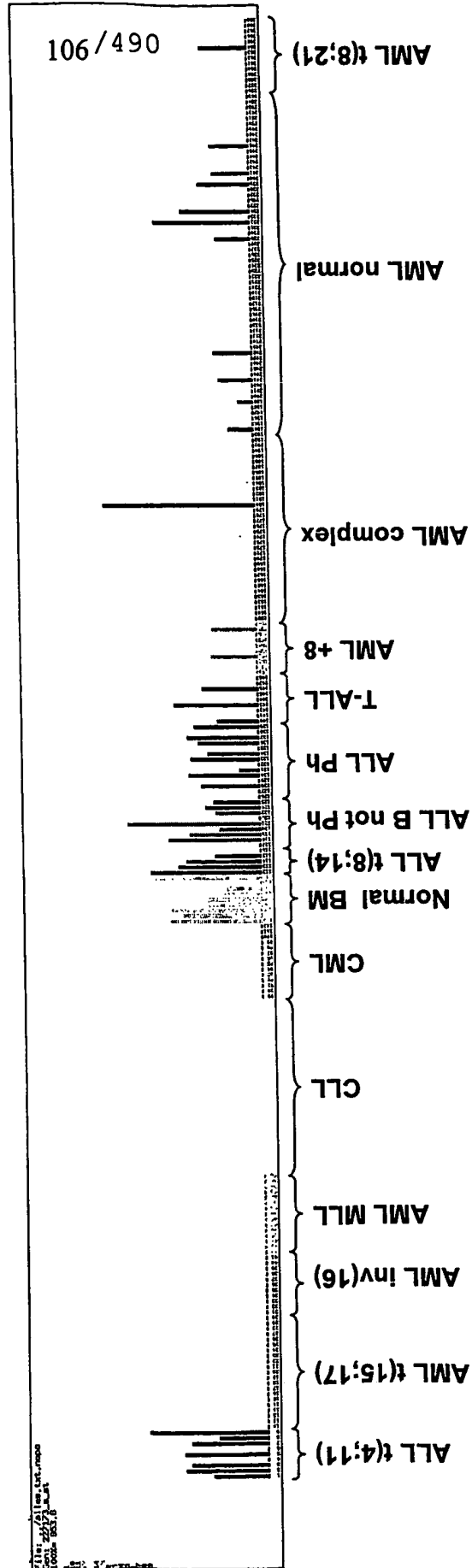


Figure 80

201482\_at, QSCN6, AML MLL vs. ALL B not Ph

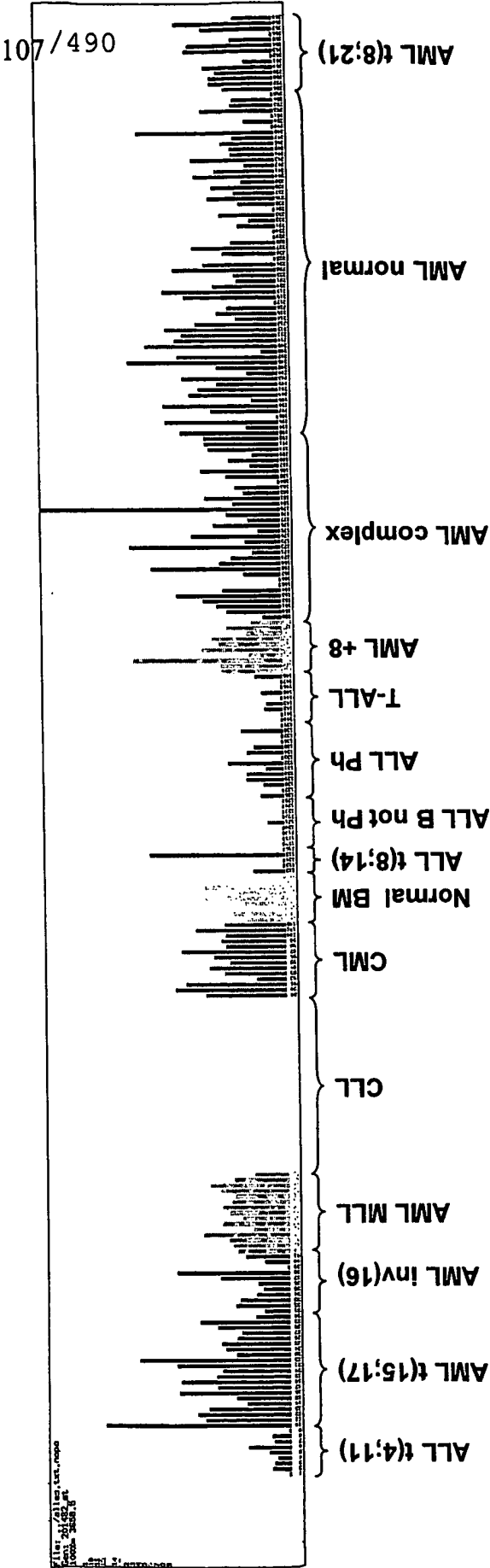


Figure 81

# 234107\_s\_at, AML MLL vs. ALL Ph

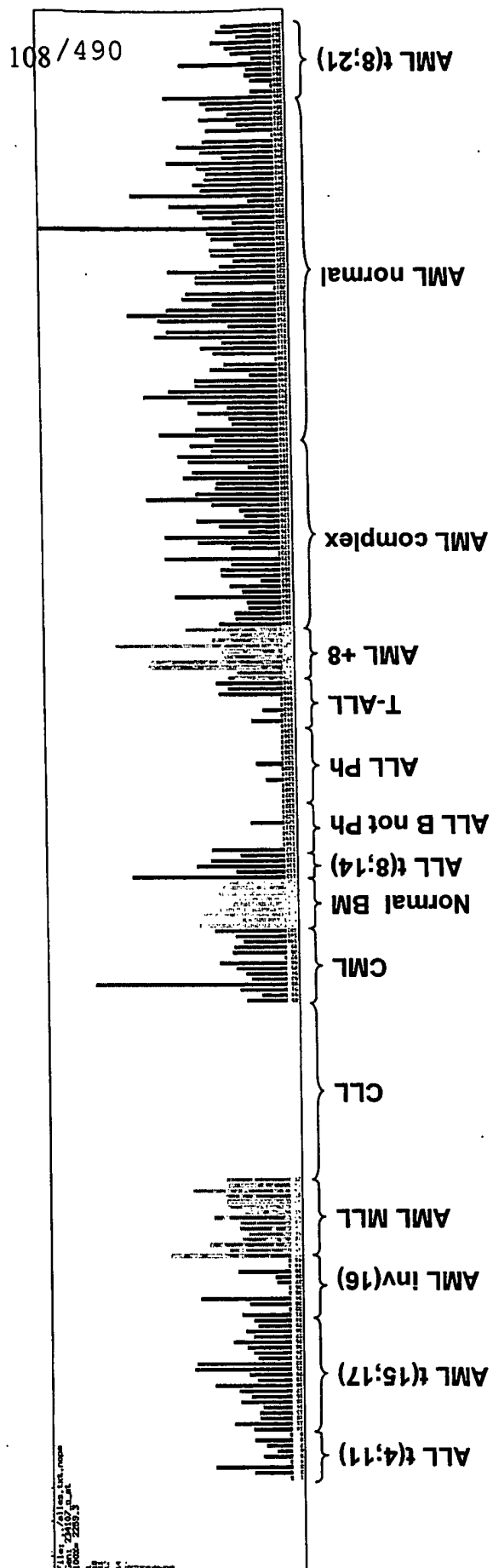


Figure 82



# 242292\_at, AML MLL vs. T-ALL

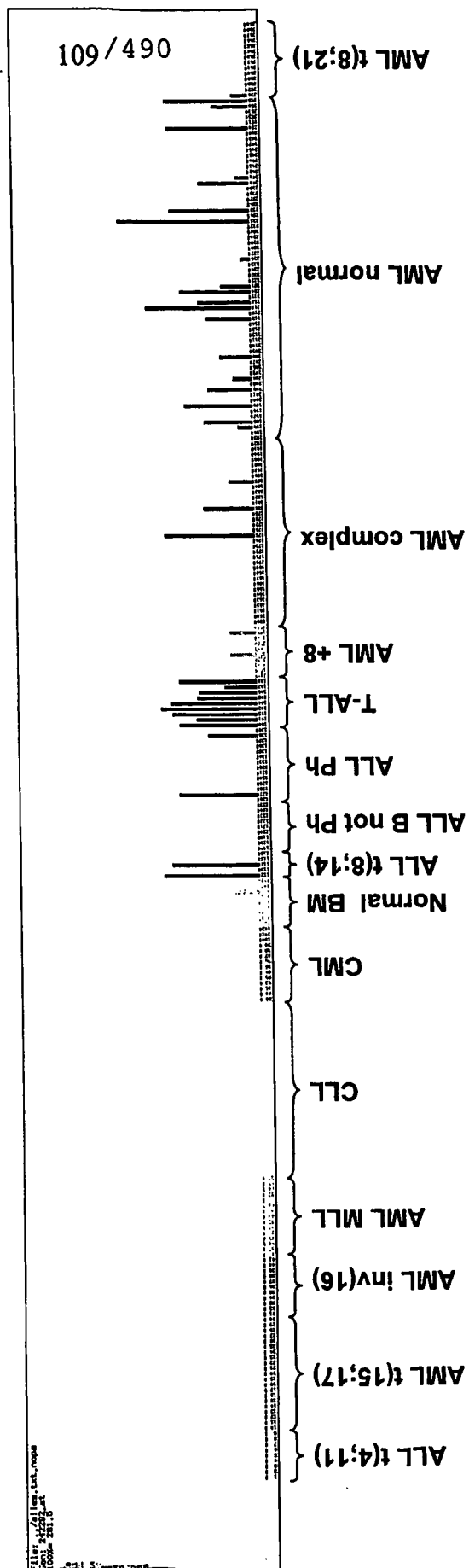
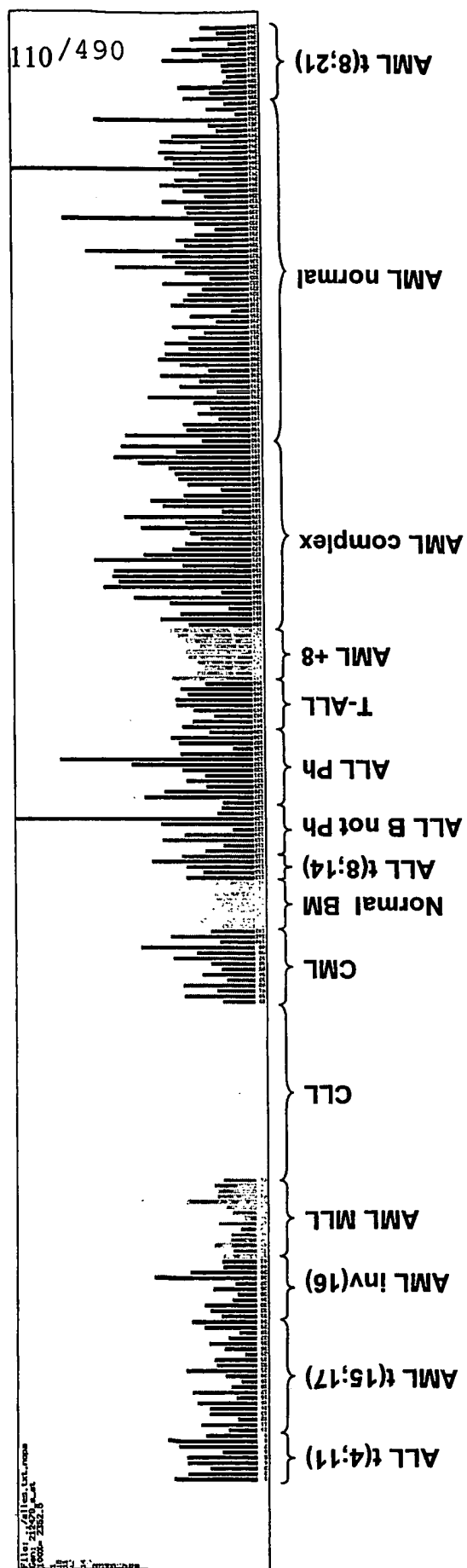


Figure 83

212479\_s\_at, FLJ13910, AML MLL vs. AML +8



**Figure 84**

218172\_s\_at, PRO2577, AML MLL vs. AML +8

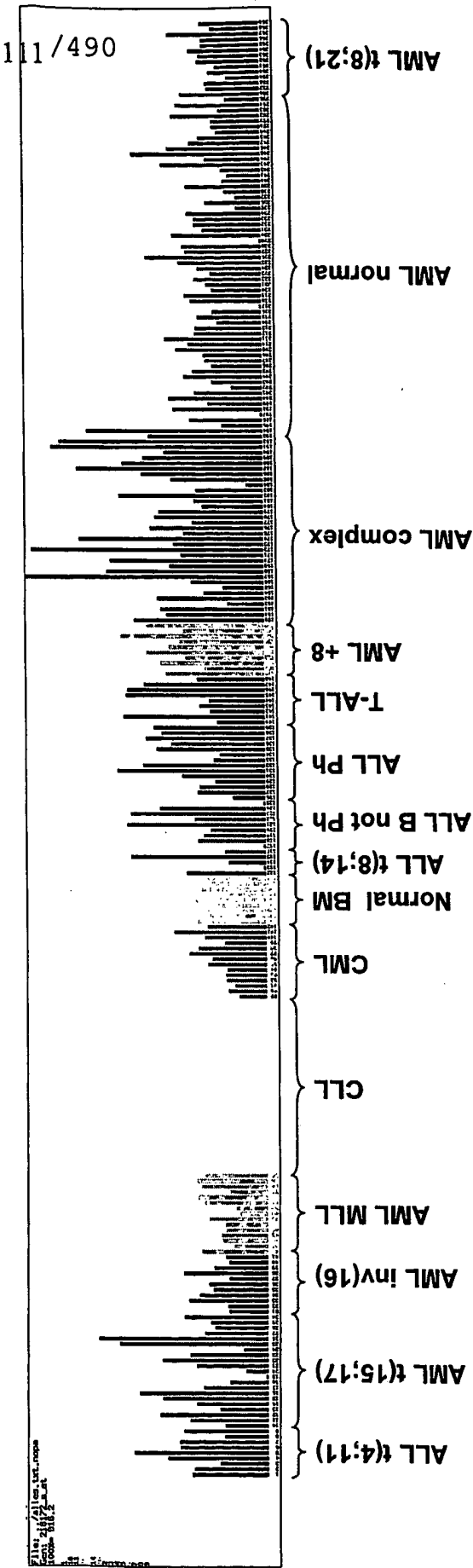
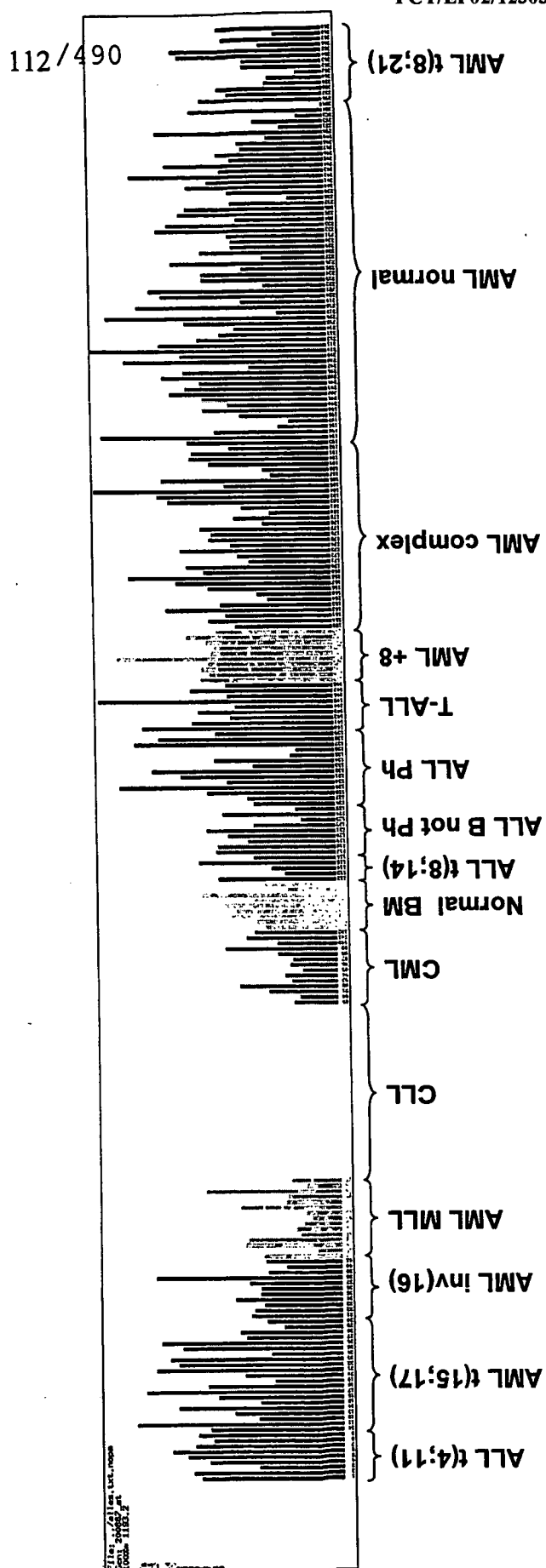


Figure 85

# 200867\_at, AML MLL vs. AML +8

Figure 86



# 202956\_at, BIG1, AML MLL vs. AML +8

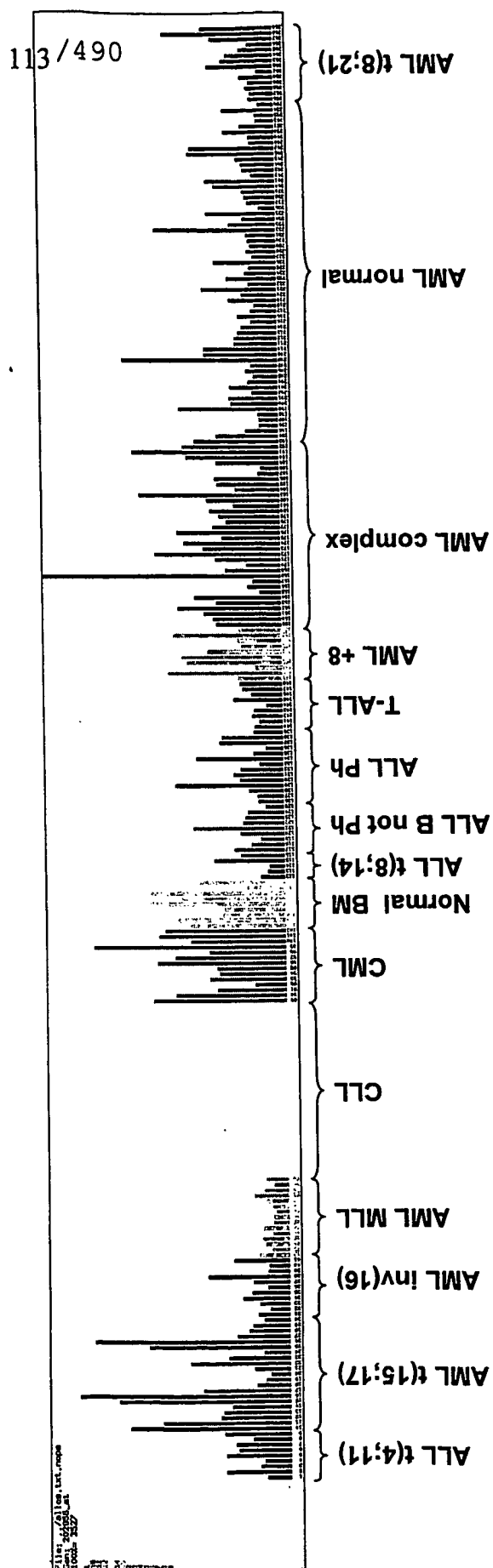


Figure 87

# 202746\_at, AML MLL vs. AML complex

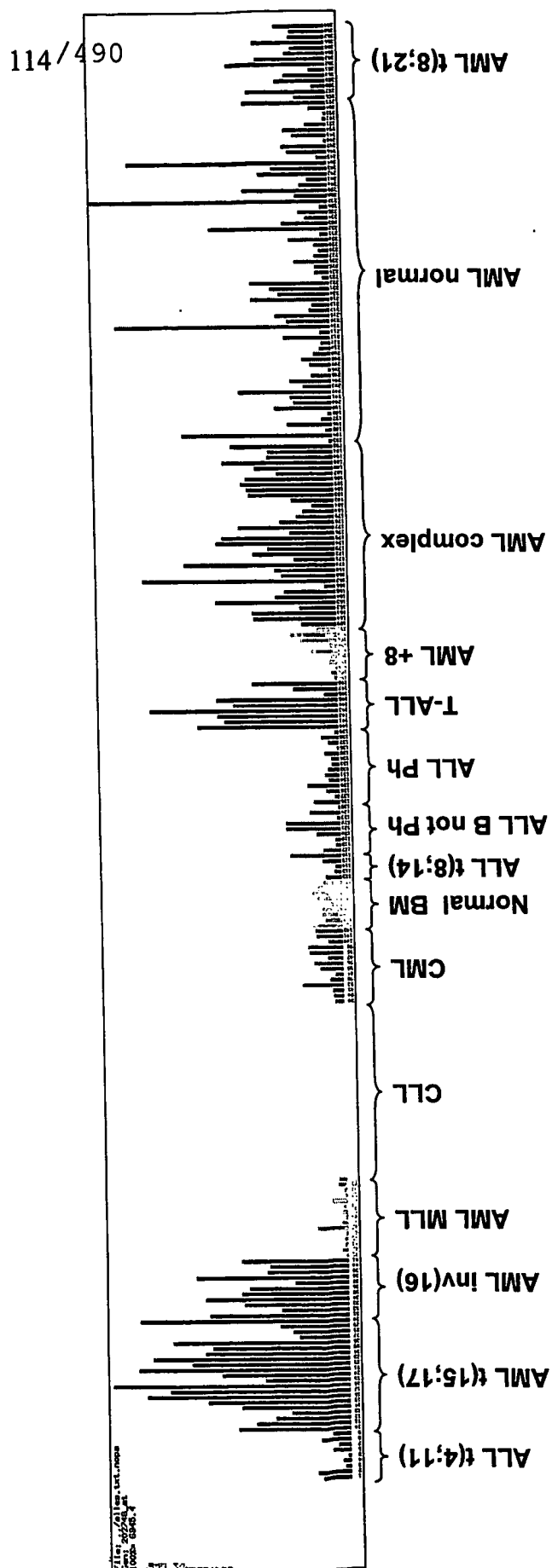


Figure 88

# 204951\_at, ARHH, AML MLL vs. AML complex

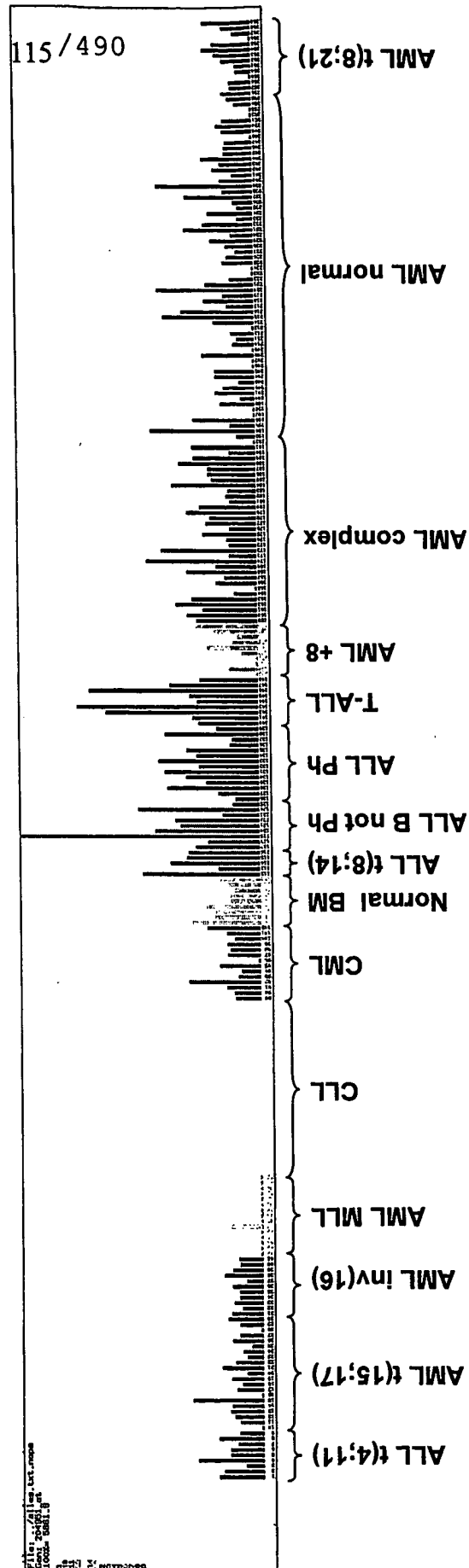


Figure 89

# 205453\_at, HOXB2, AML MLL vs. AML normal

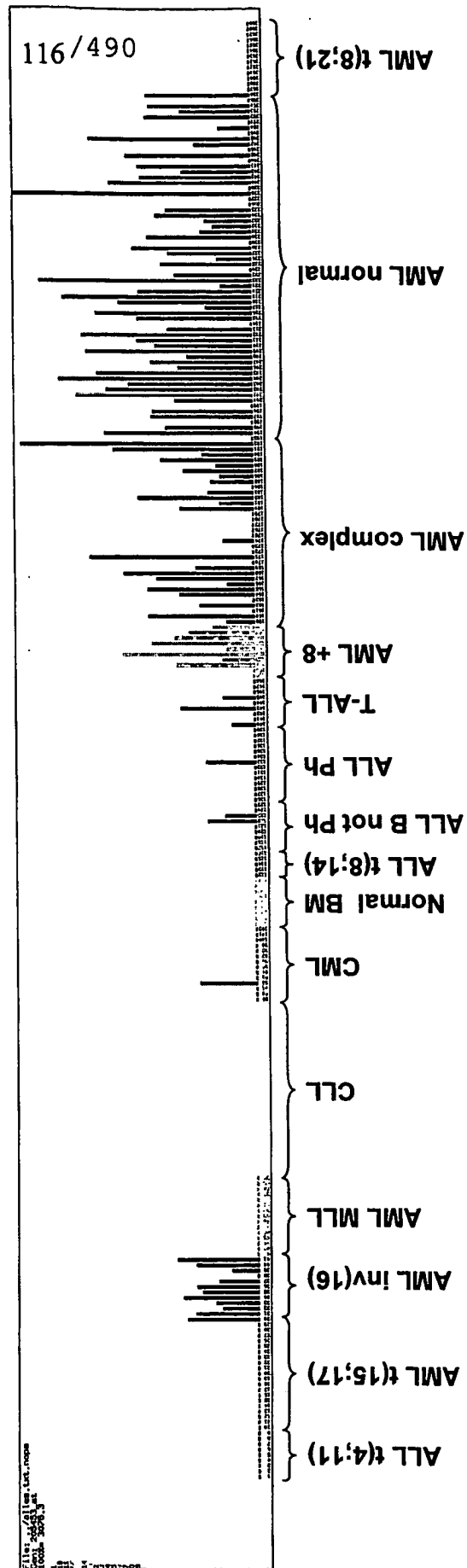


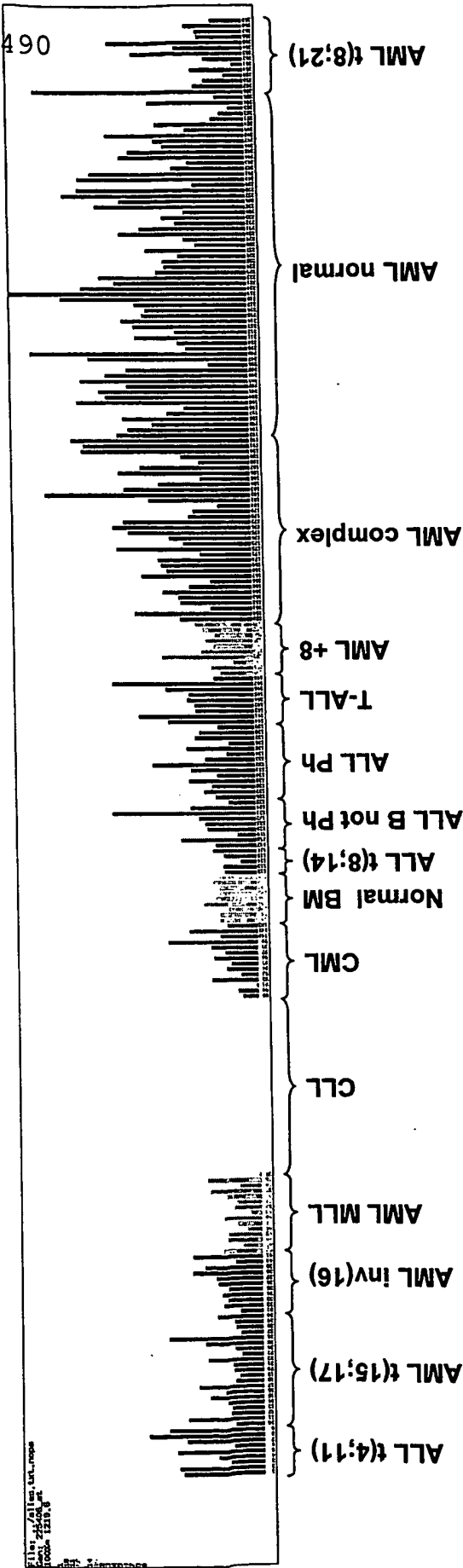
Figure 90



225406\_at, TSG, AML MLL vs. AML normal

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Figure 91



# 201105\_at, LGALS1, AML MLL vs. AML t(8;21)

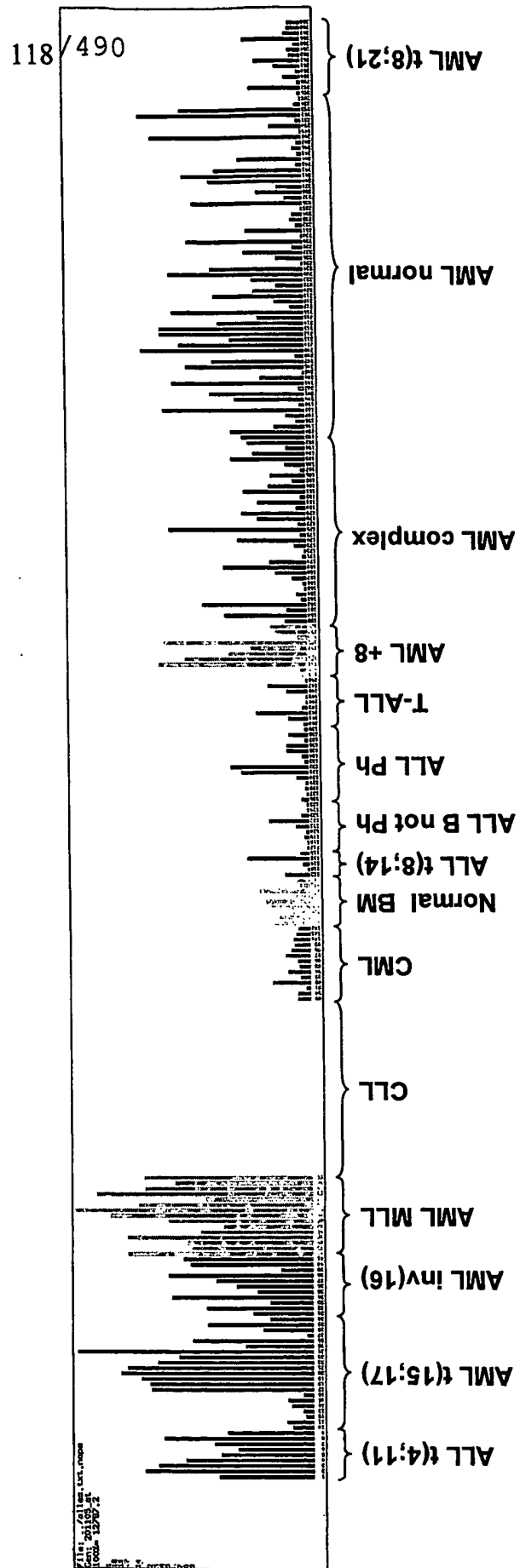
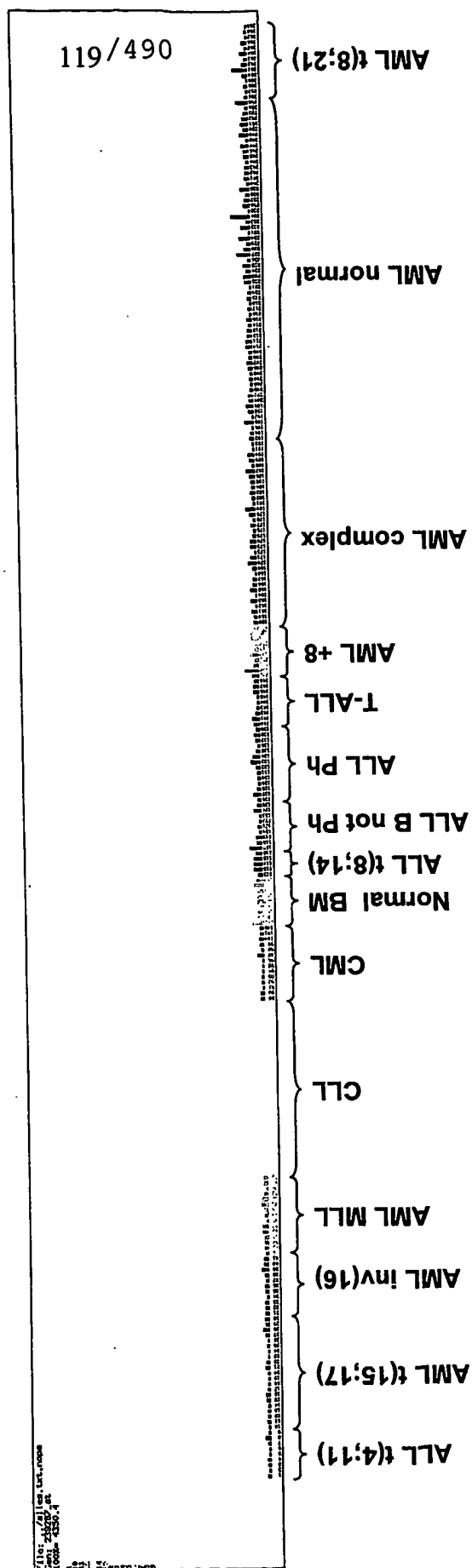


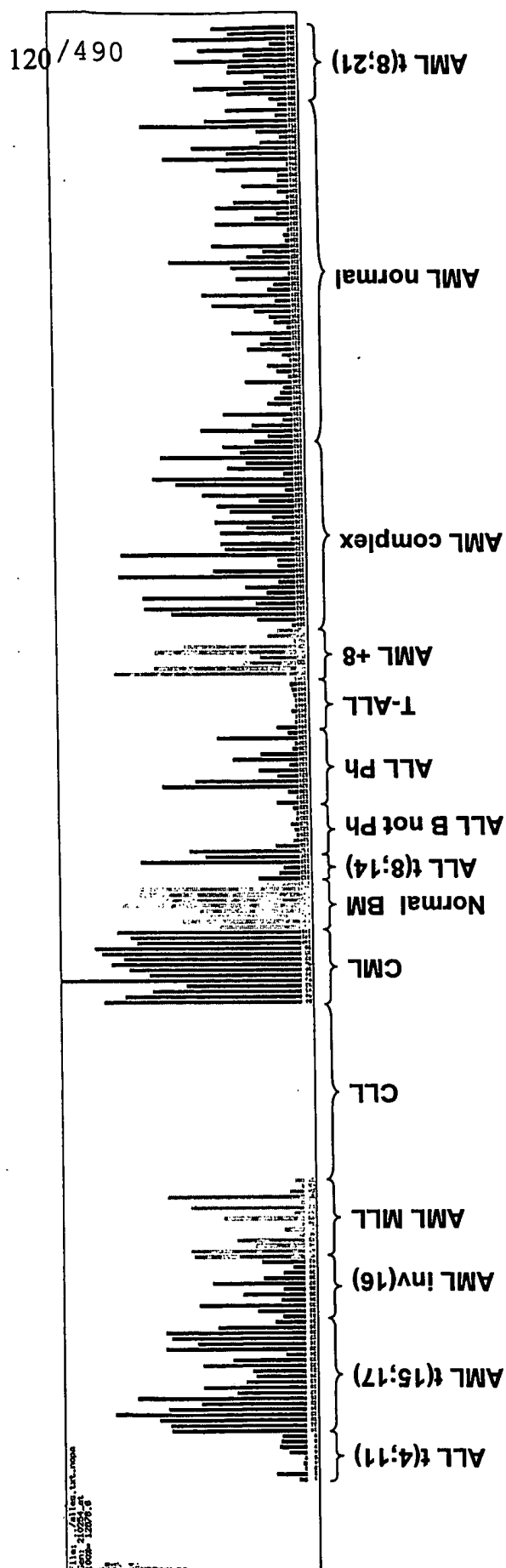
Figure 92

239287\_at, CLL vs. all others



**Figure 93**

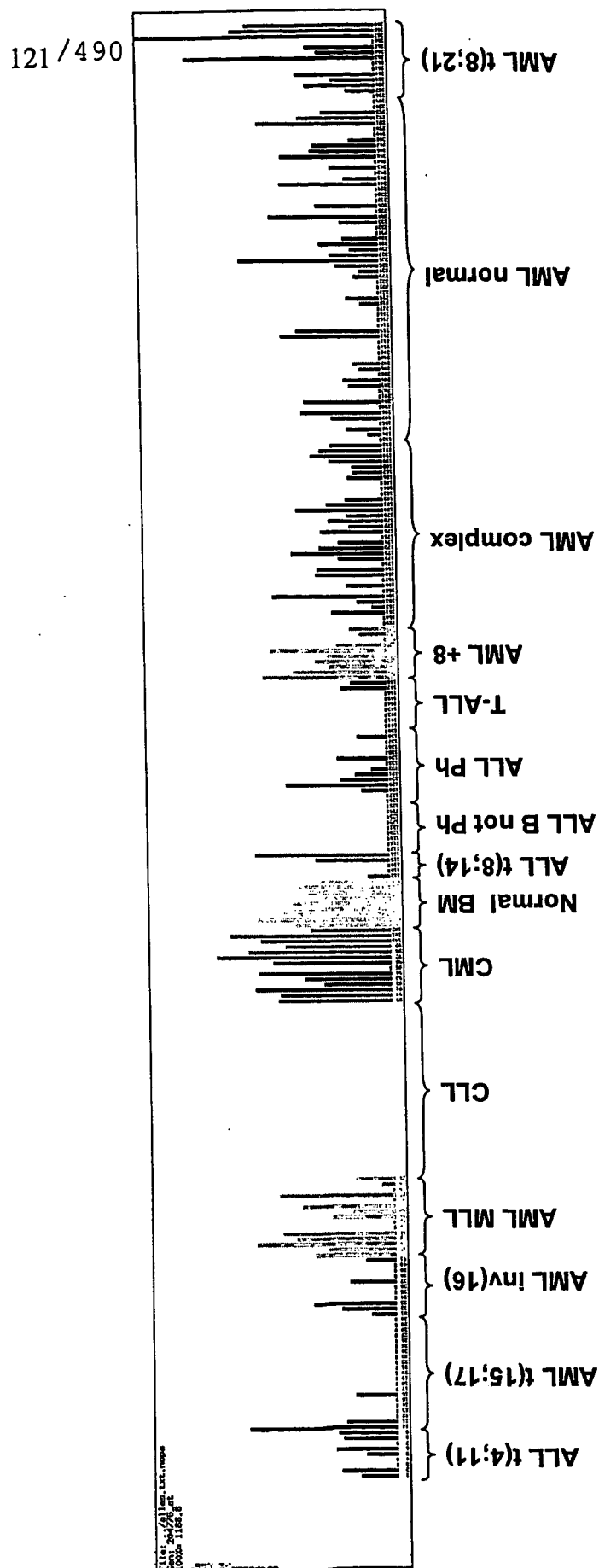
## 210254\_at, CLL vs. CML



**Figure 94**

# 204776\_at, THBS4, CLL vs. normal BM

Figure 95



# 202580\_x\_at, FOXM1, CLL vs. ALL t(8;14)

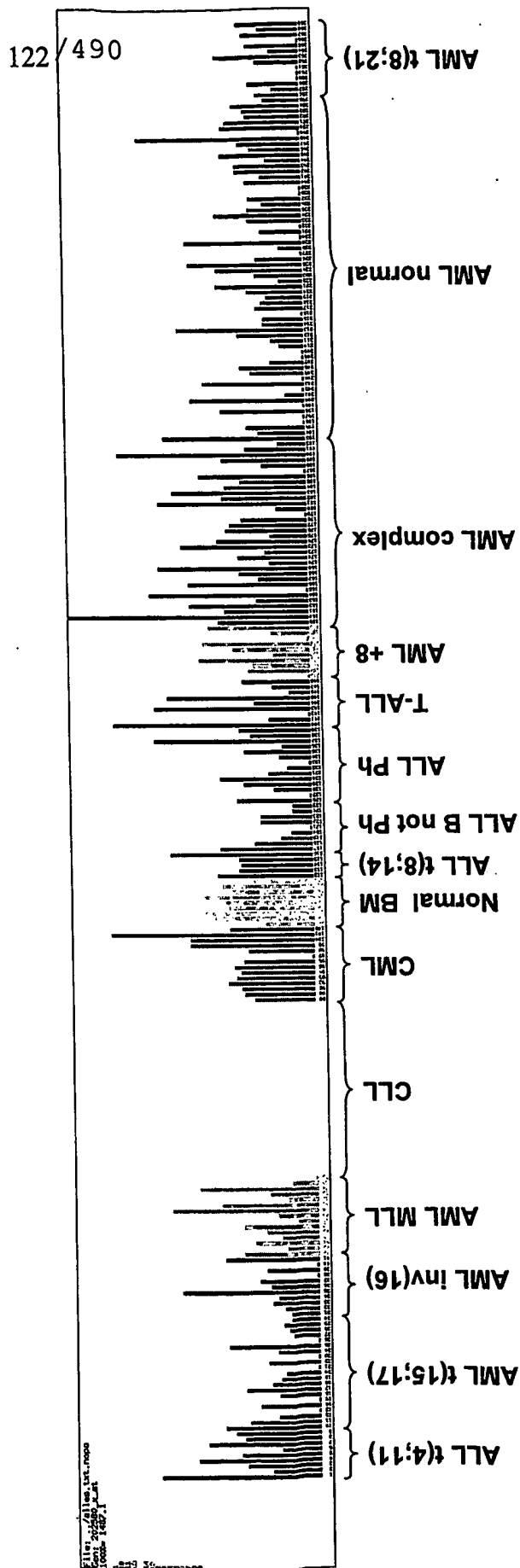
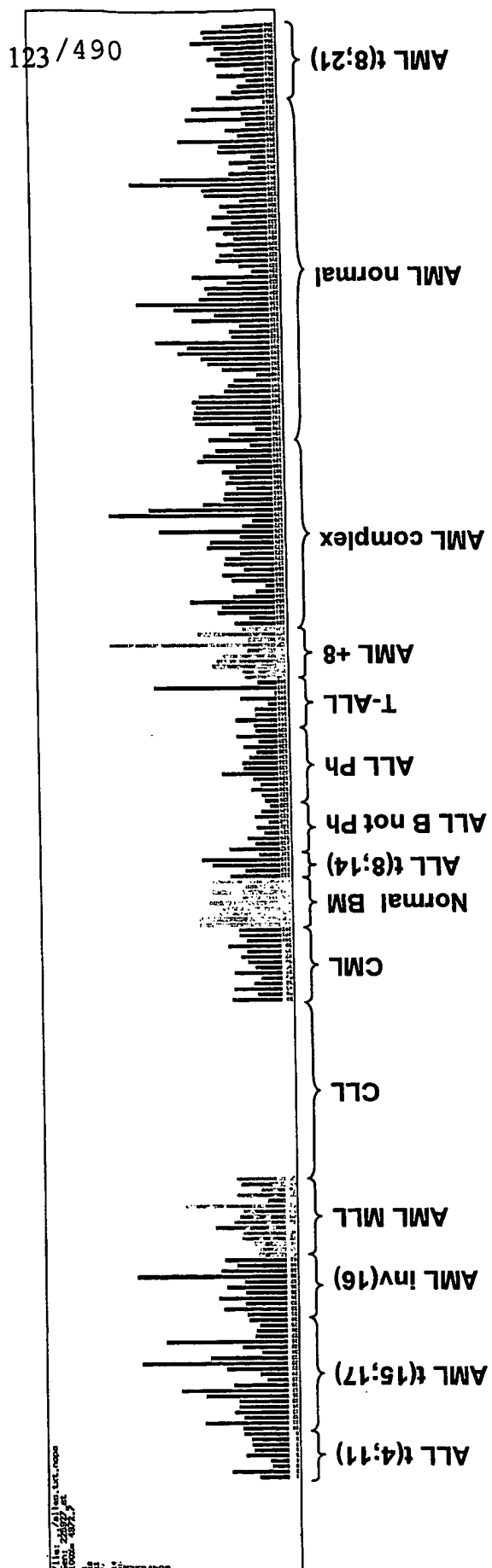


Figure 96

# 225927\_at, MAP3K1, CLL vs. ALL B not Ph

Figure 97



# 204663\_at, ME3, CLL vs. ALL Ph

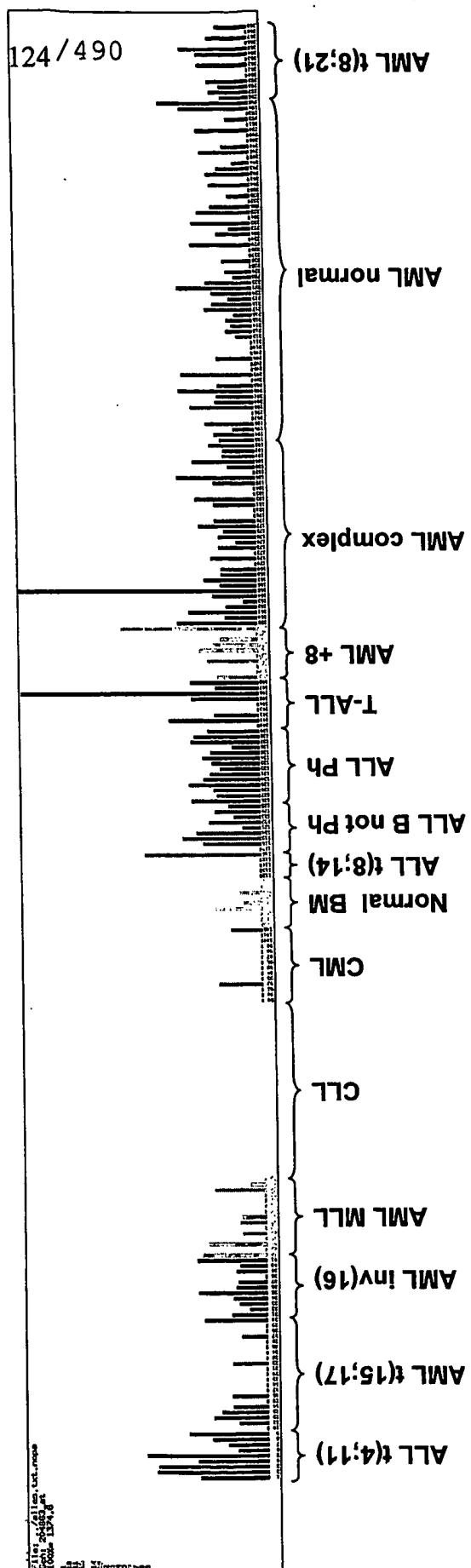
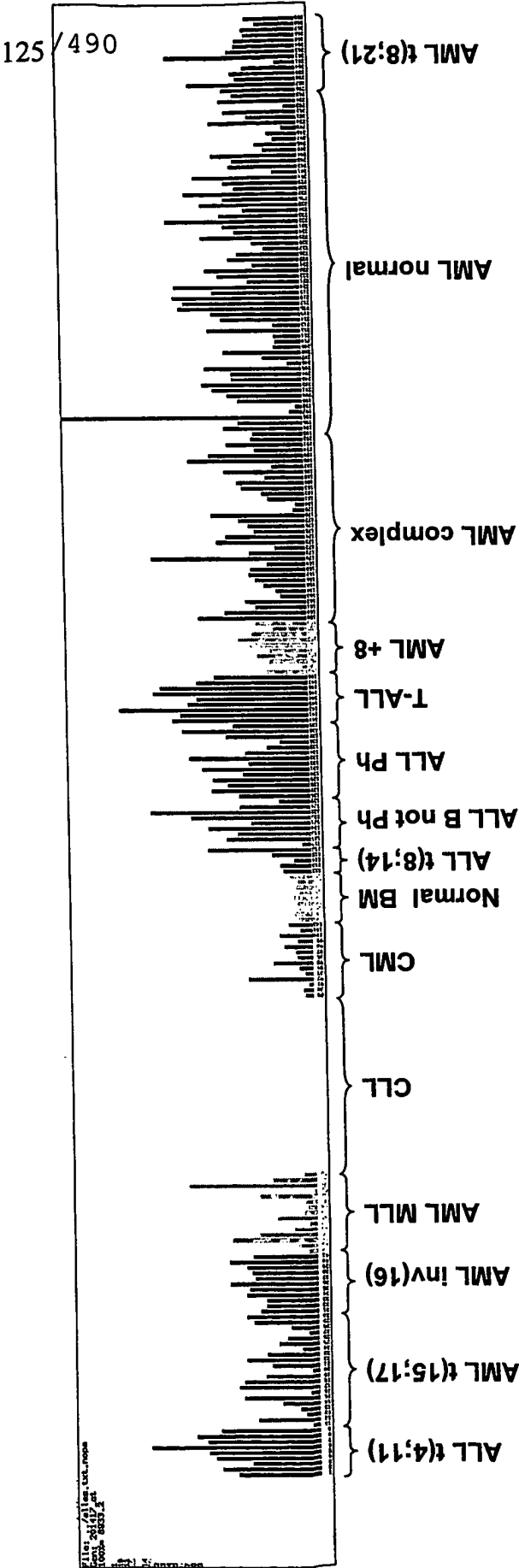


Figure 98



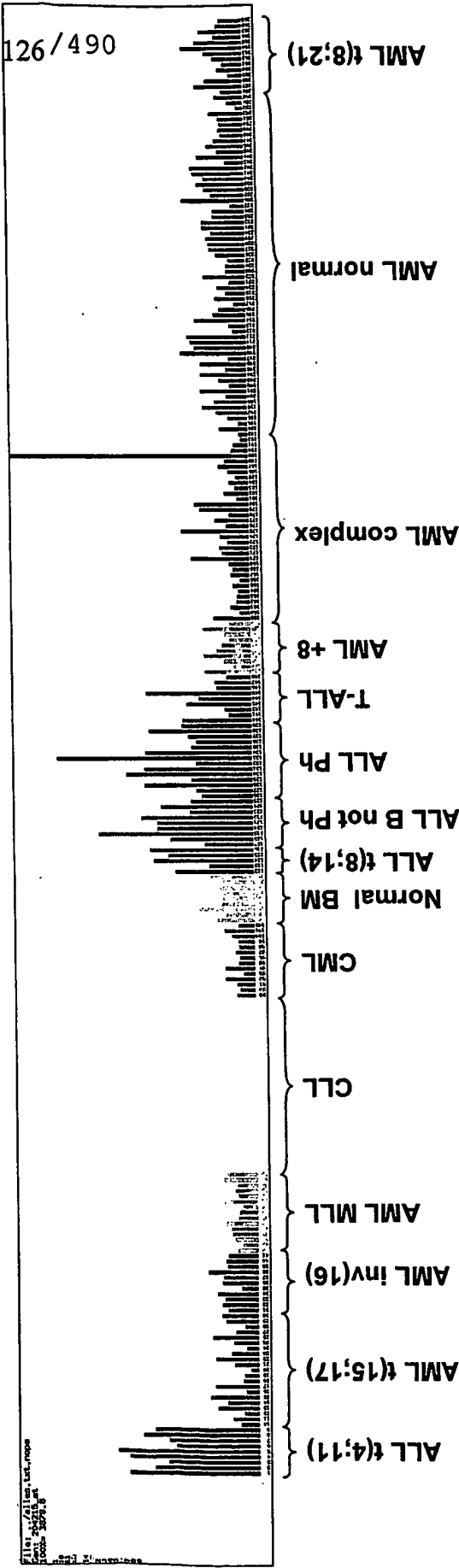
201417\_at, CLL vs. T-ALL

Figure 99

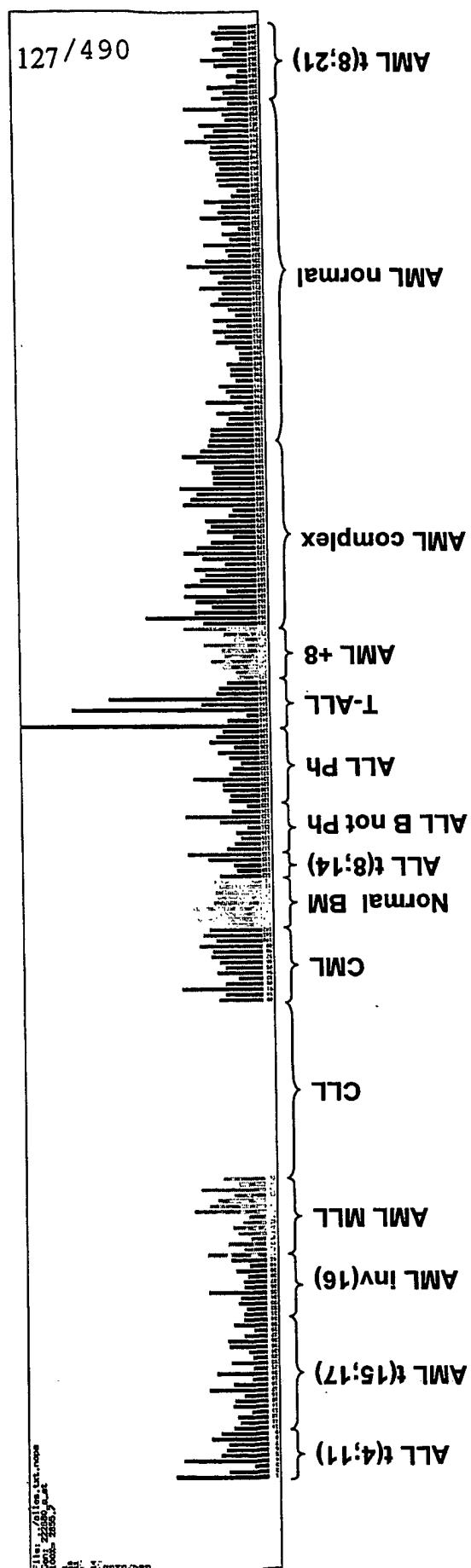


204215\_at, MGC4175, CLL vs. AML +8

Figure 100



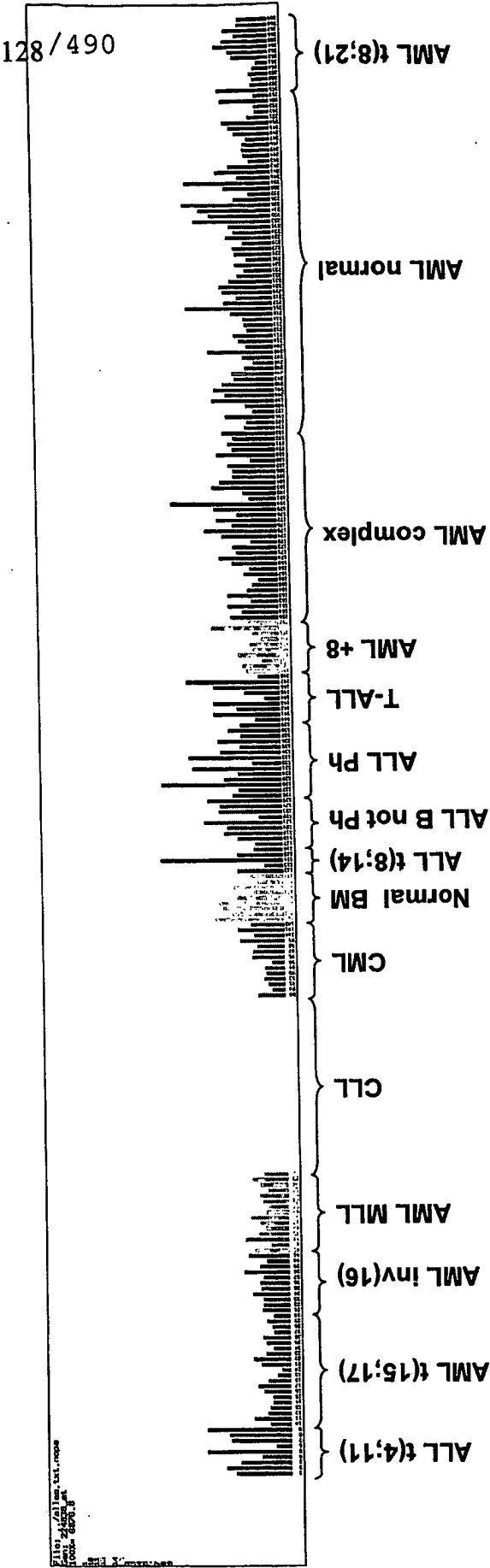
## 222680\_s\_at, RAMP, CLL vs. AML complex



**Figure 101**

224838\_at, CLL vs. AML normal

Figure 102



205192\_at, MAP3K14, CLL vs. AML t(8;21)

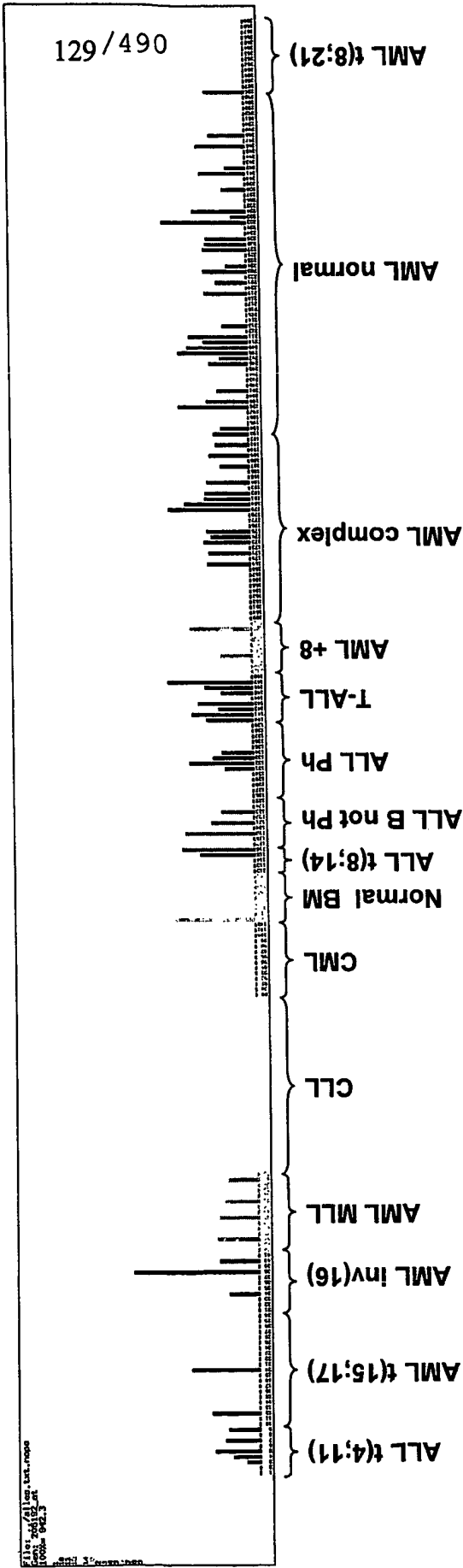


Figure 103

# 205557\_at, BPI, CML vs. all others

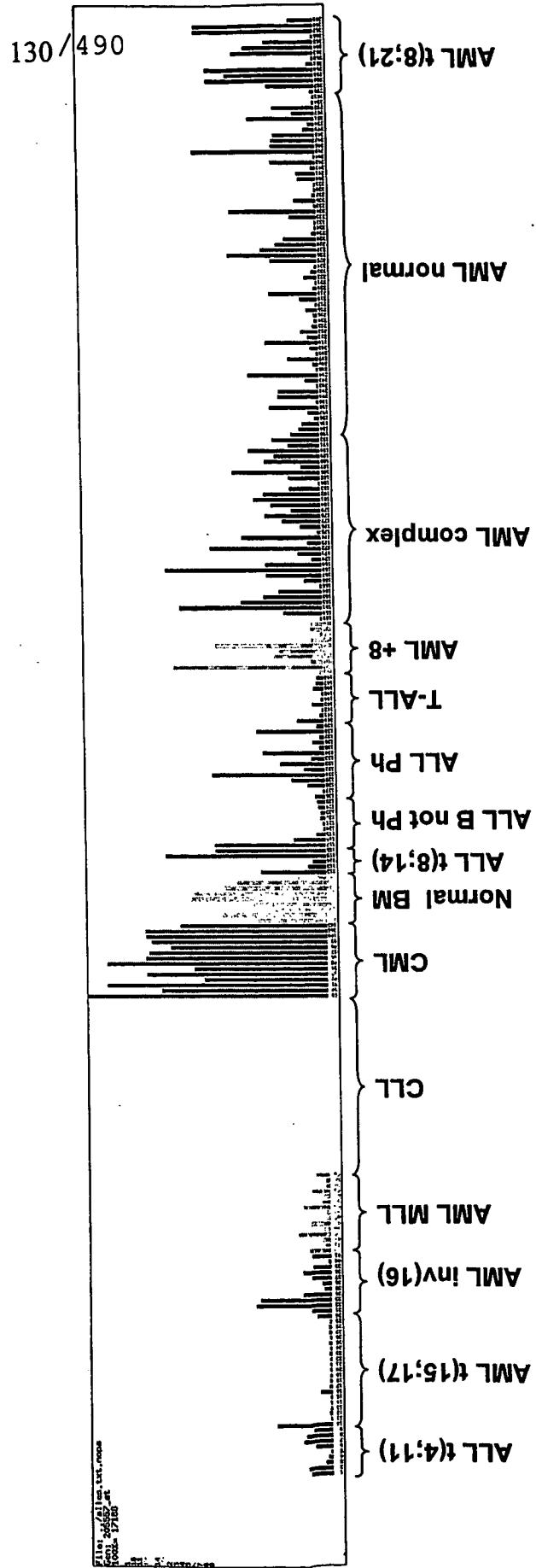


Figure 104

# 209772\_s\_at, CD24, CML vs. all others

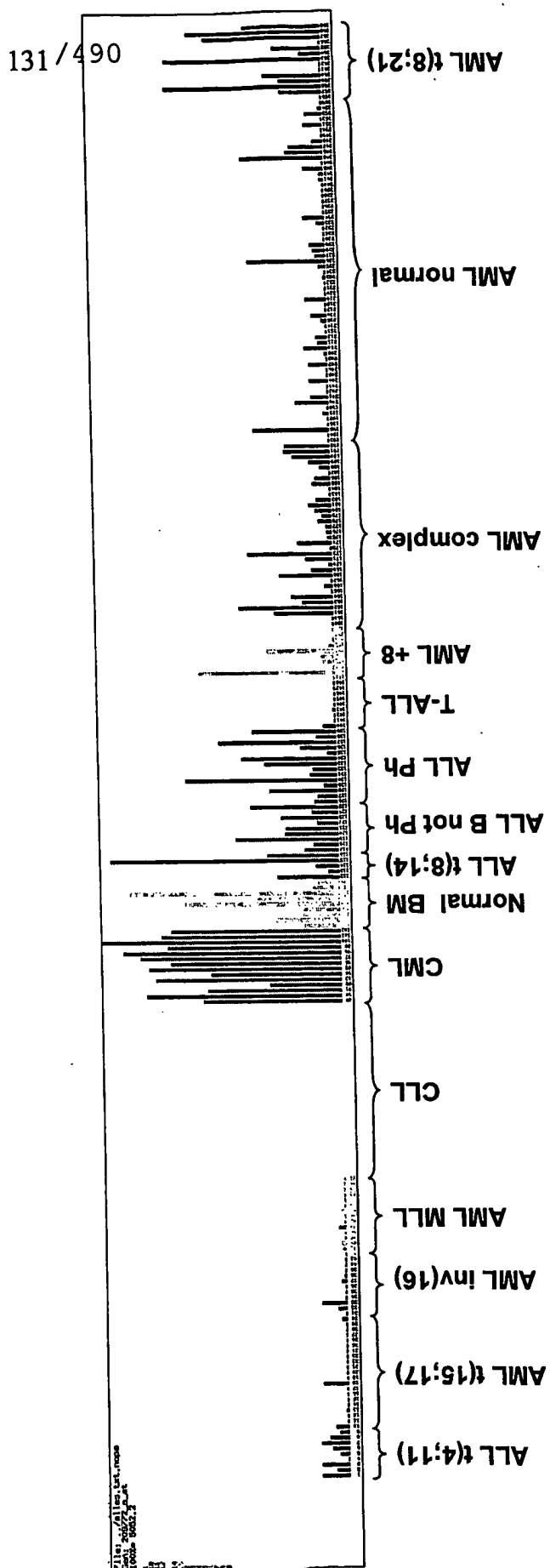


Figure 105

227198\_at, CML vs. normal BM

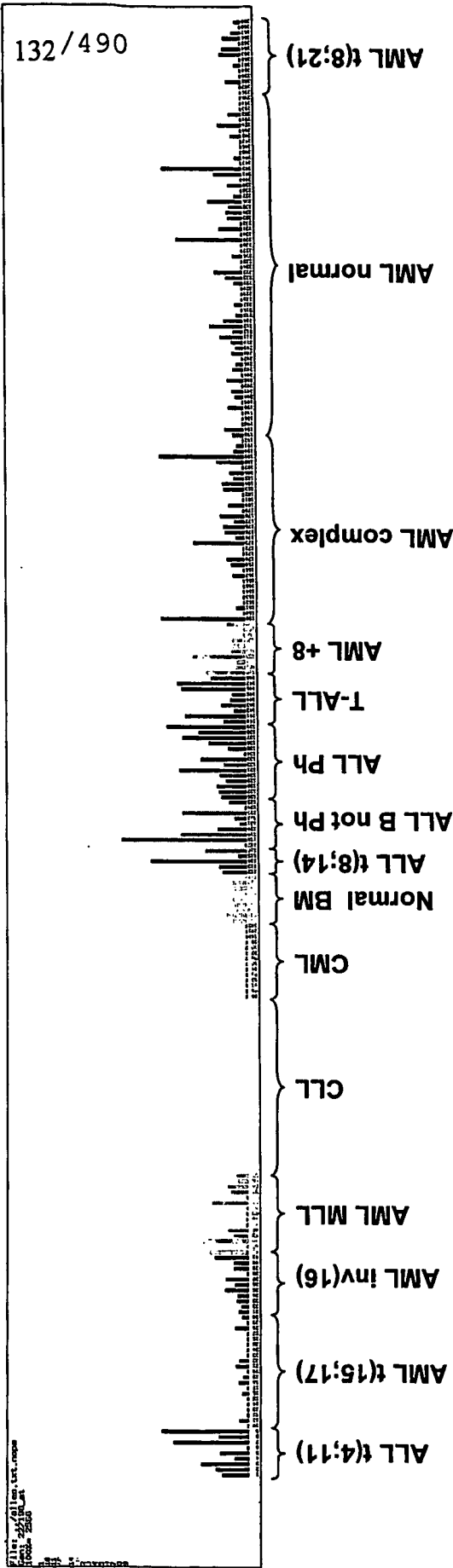


Figure 106



# 231215\_at, CML vs. ALL t(8;14)

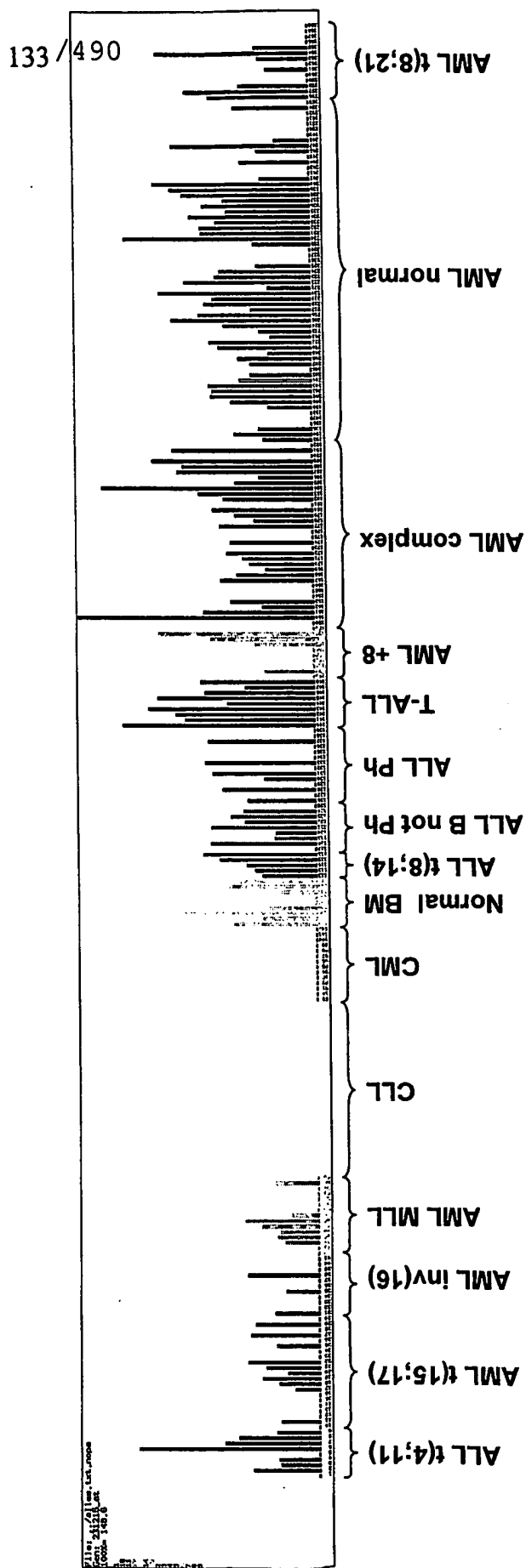


Figure 107

# 206440\_at, VELI1, CML vs. ALL B not Ph

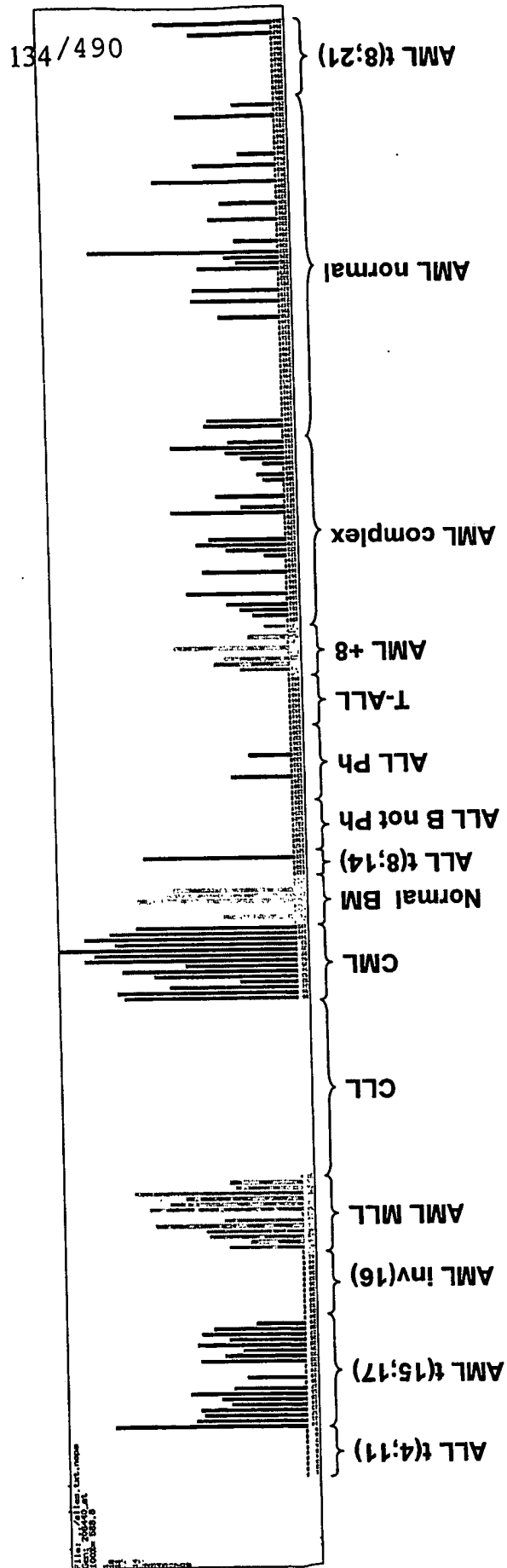


Figure 108

209619\_at, CD74, CML vs. ALL Ph

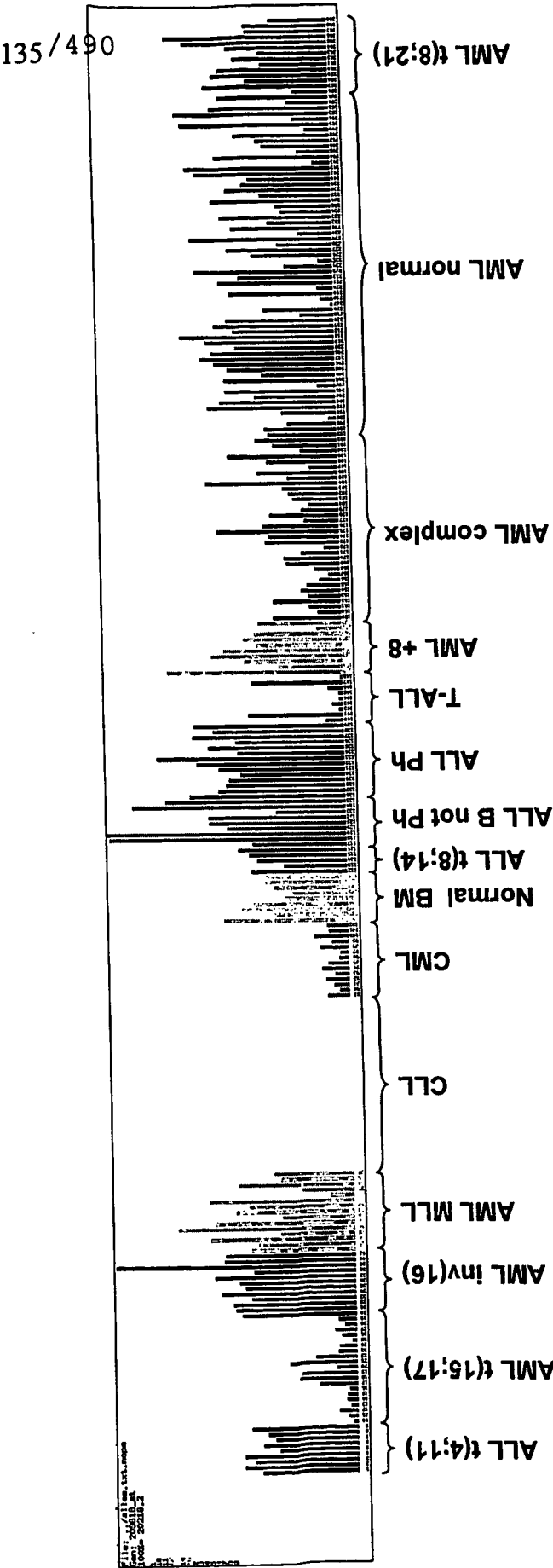


Figure 109

# 210254\_at, CML vs. T-ALL

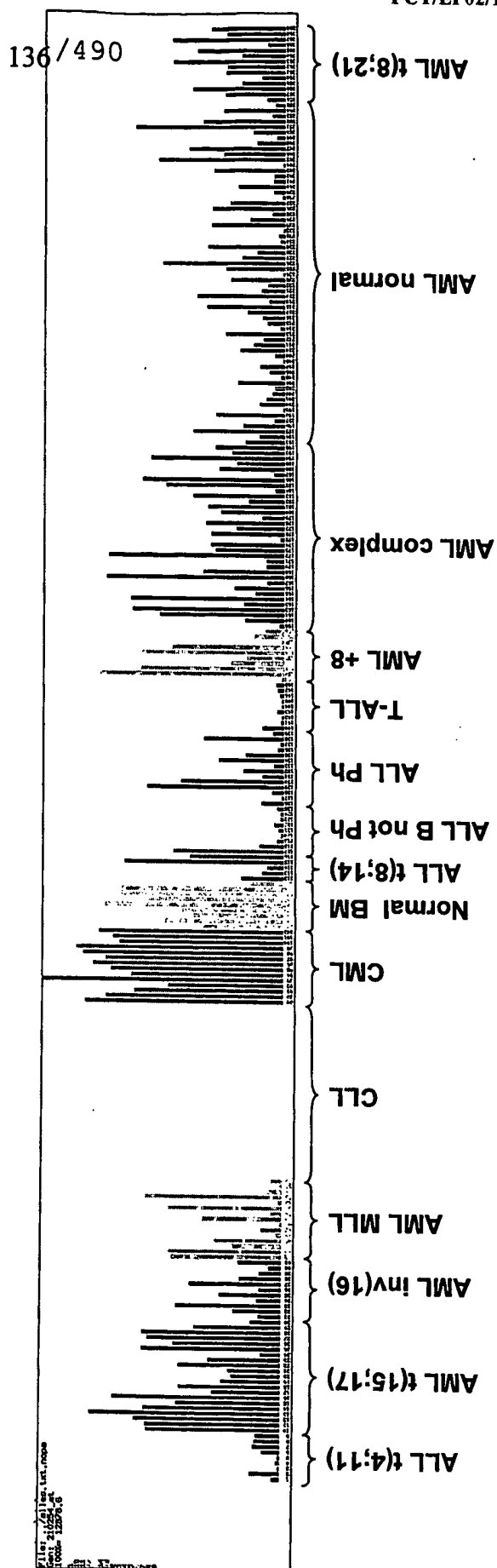


Figure 110

# 212531\_at, LCN2, CML vs. AML +8

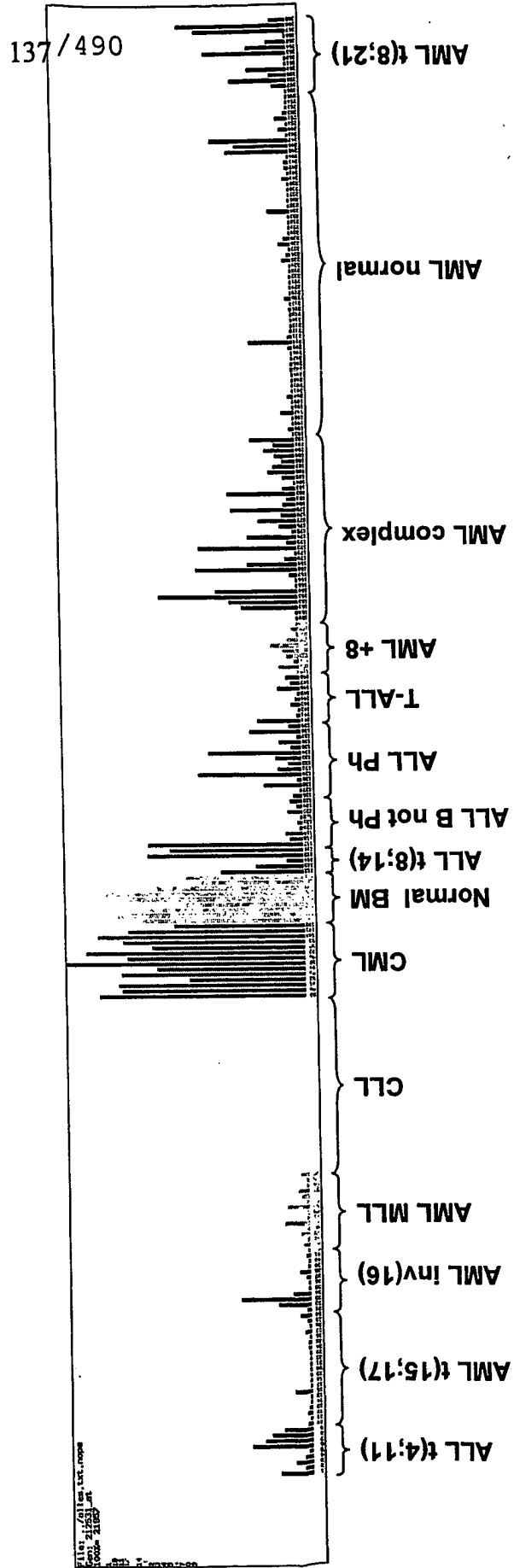


Figure 111

# 212531\_at, LCN2, CML vs. AML complex

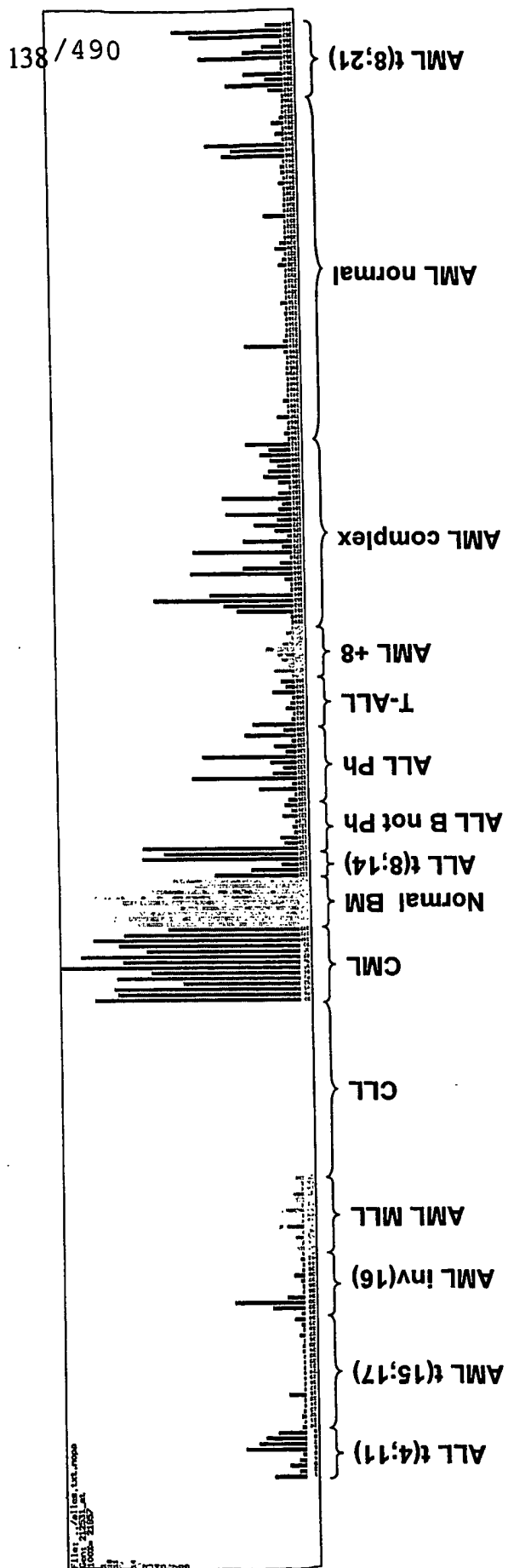


Figure 112

212531\_at, LCN2, CML vs. AML normal

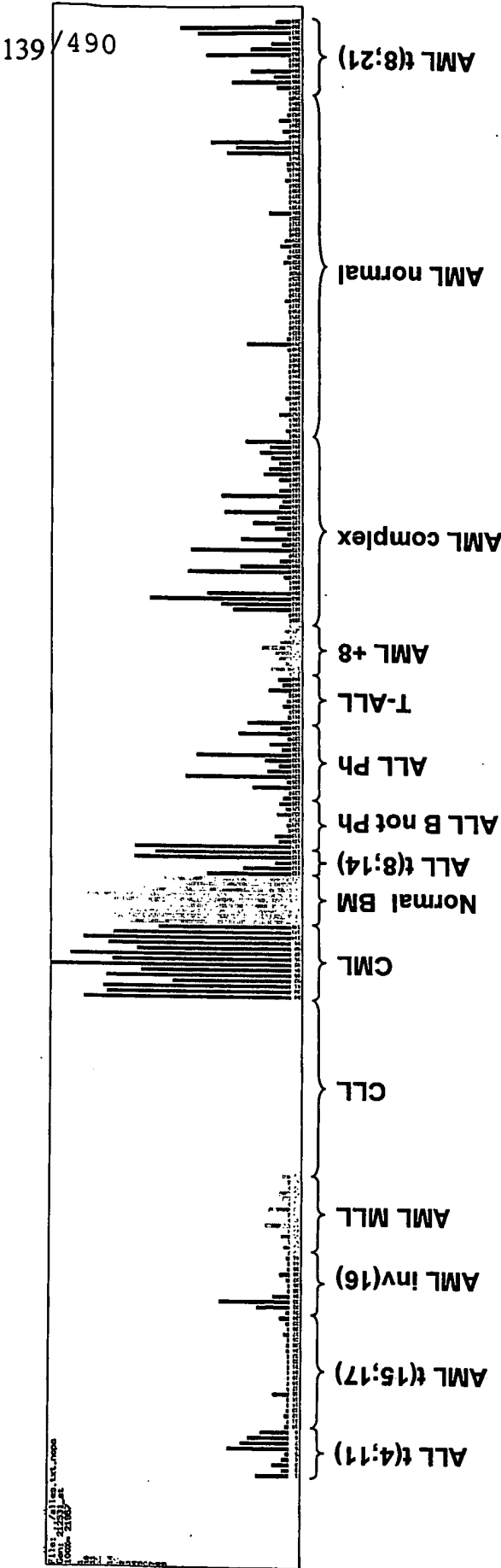
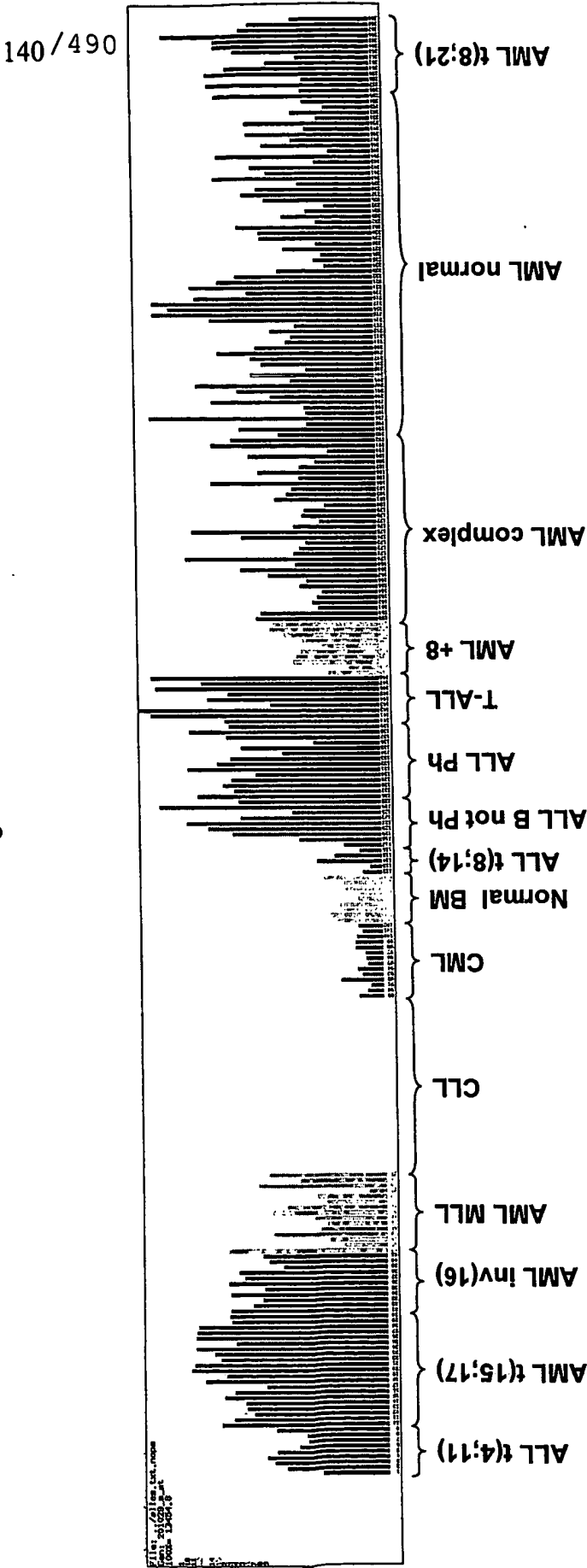


Figure 113

201029\_s\_at, MIC2, CML vs. AML t(8;21)

Figure 114





227497\_at, CML vs. all others

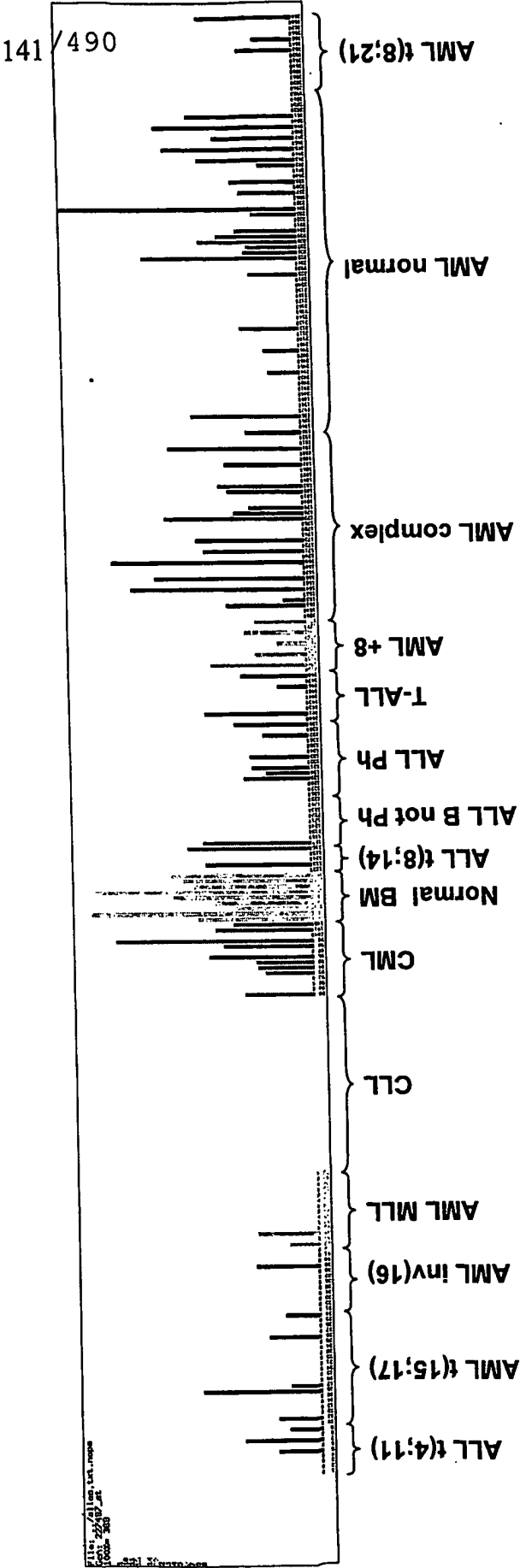


Figure 115

# 222147\_s\_at, normal BM vs. ALL t(8;14)

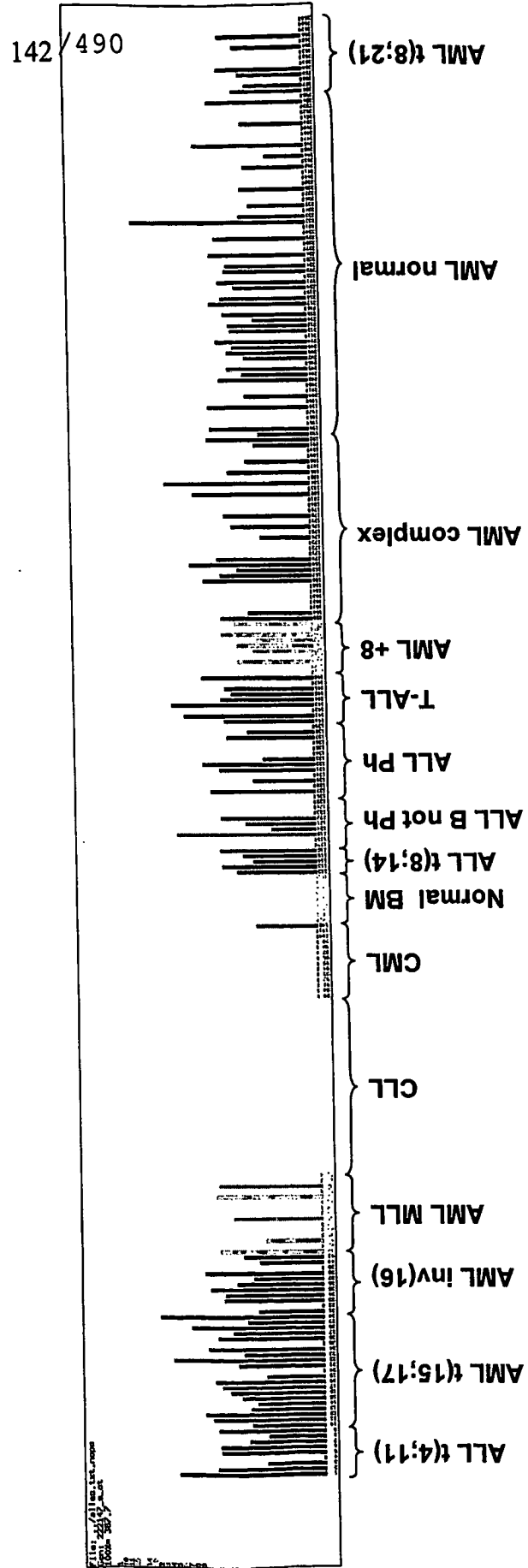


Figure 116

# 201506\_at, TGFBI, normal BM vs. ALL B not Ph

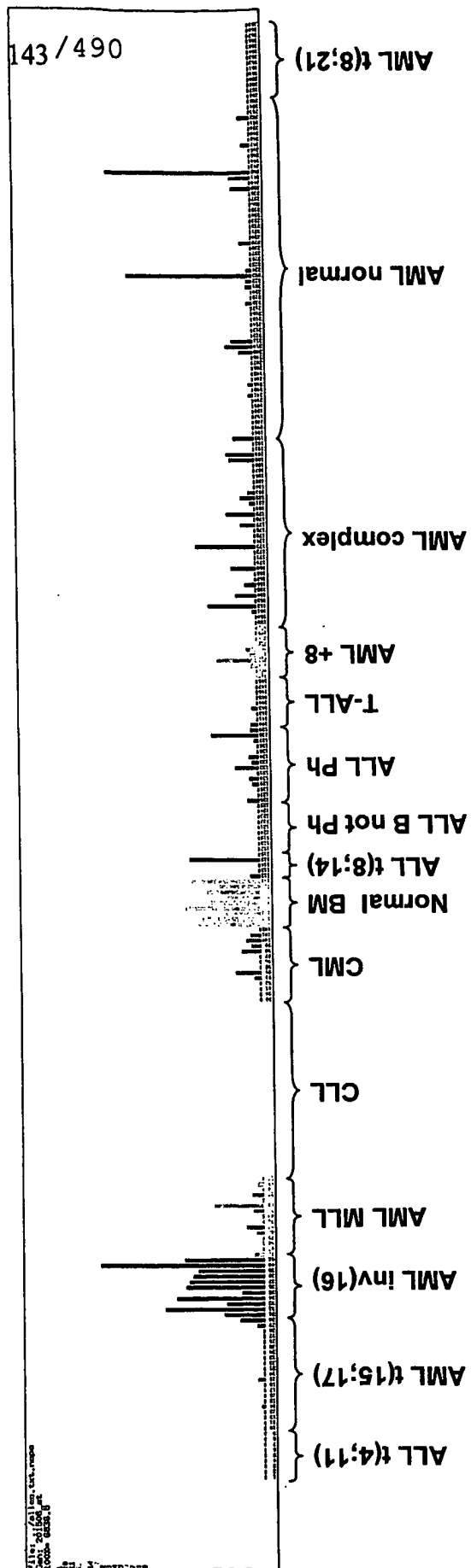


Figure 117

225792\_at, normal BM vs. ALL Ph

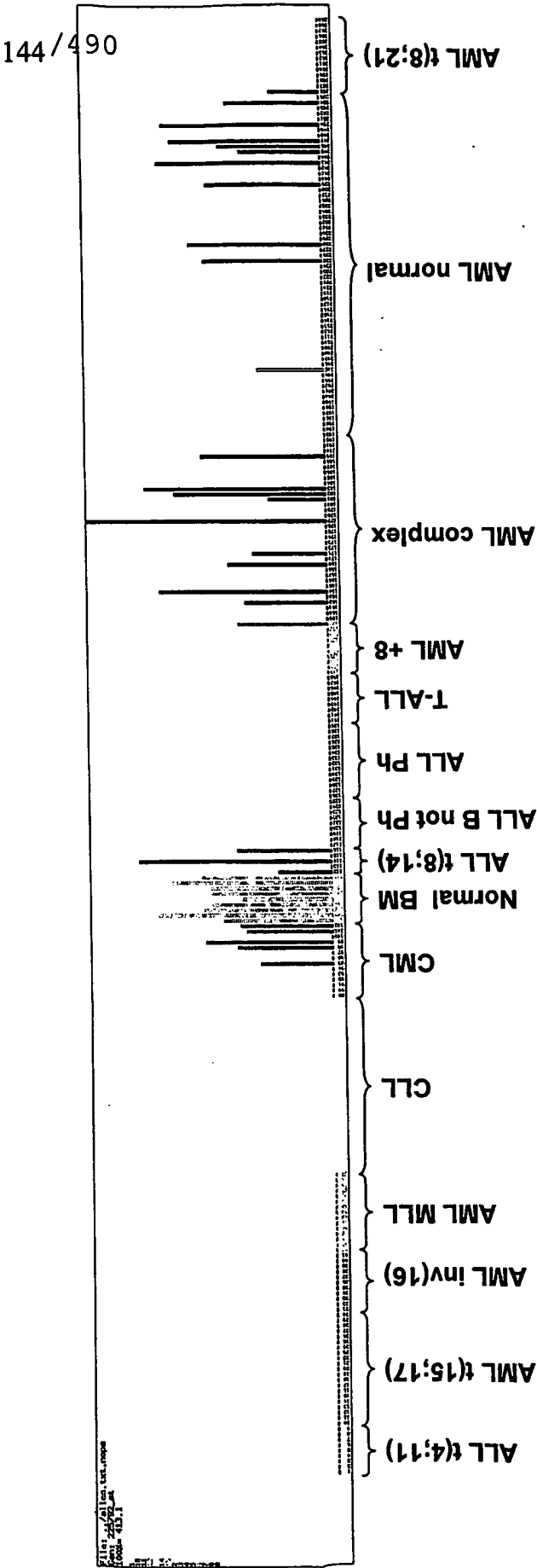


Figure 118

231241\_at, normal BM vs. T-ALL

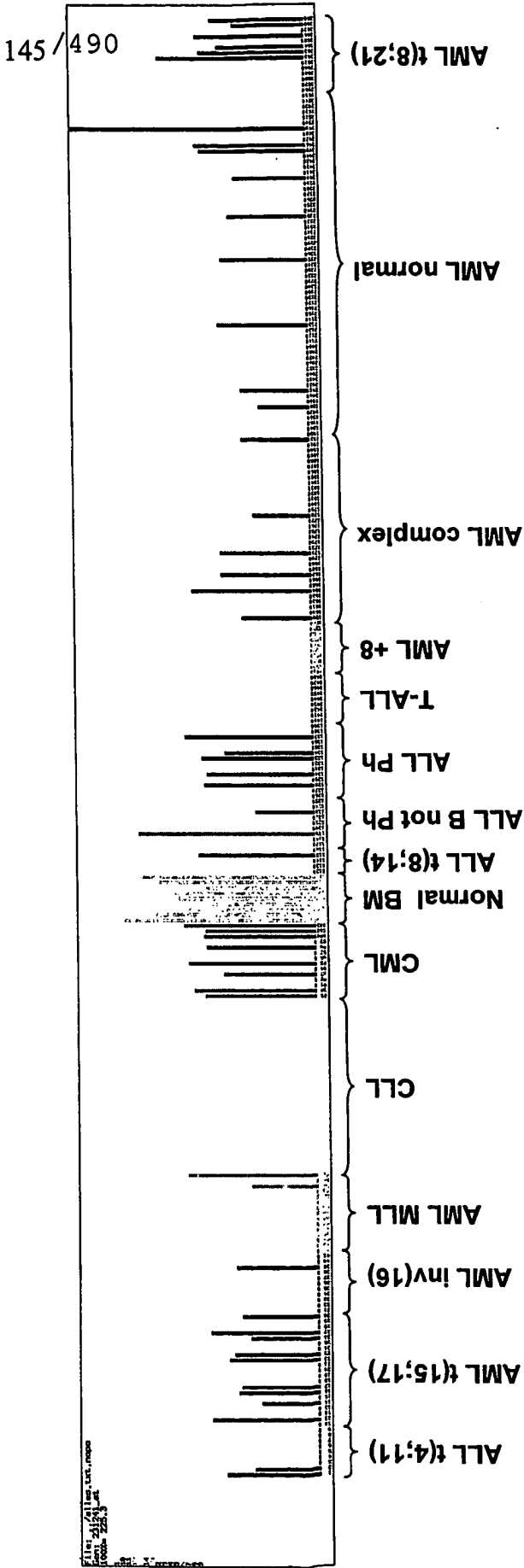


Figure 119

# 231241\_at, normal BM vs. AML +8

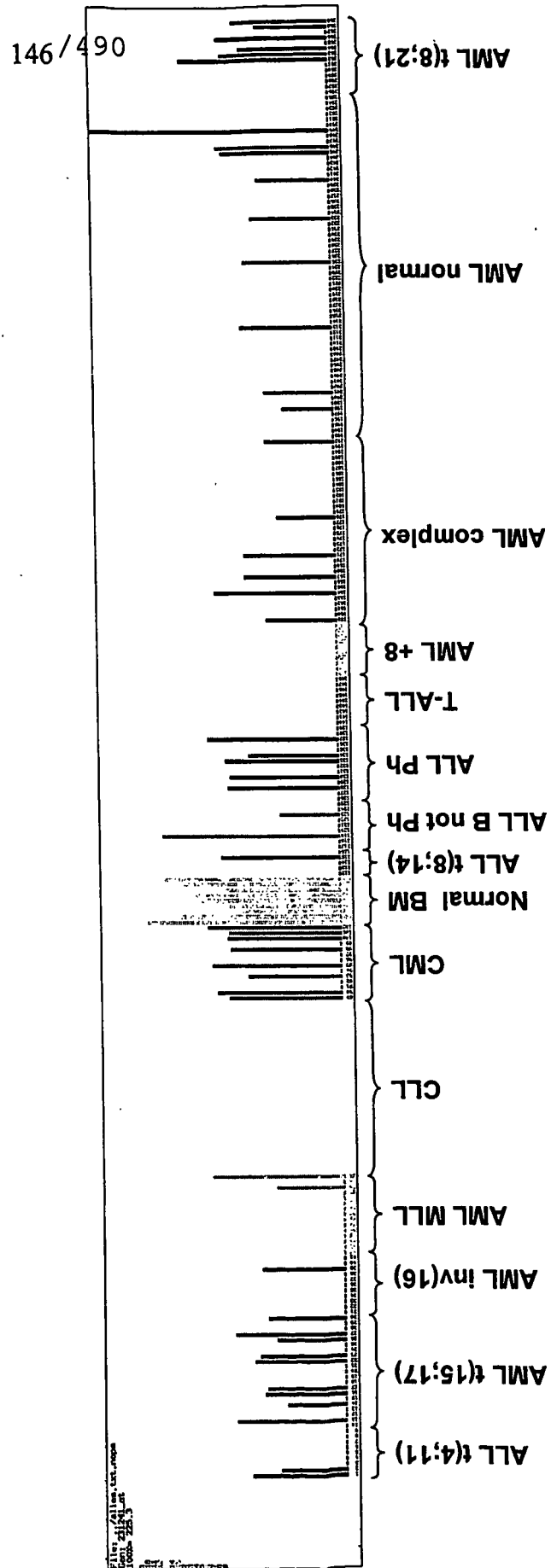


Figure 120

# 231241\_at, normal BM vs. AML complex

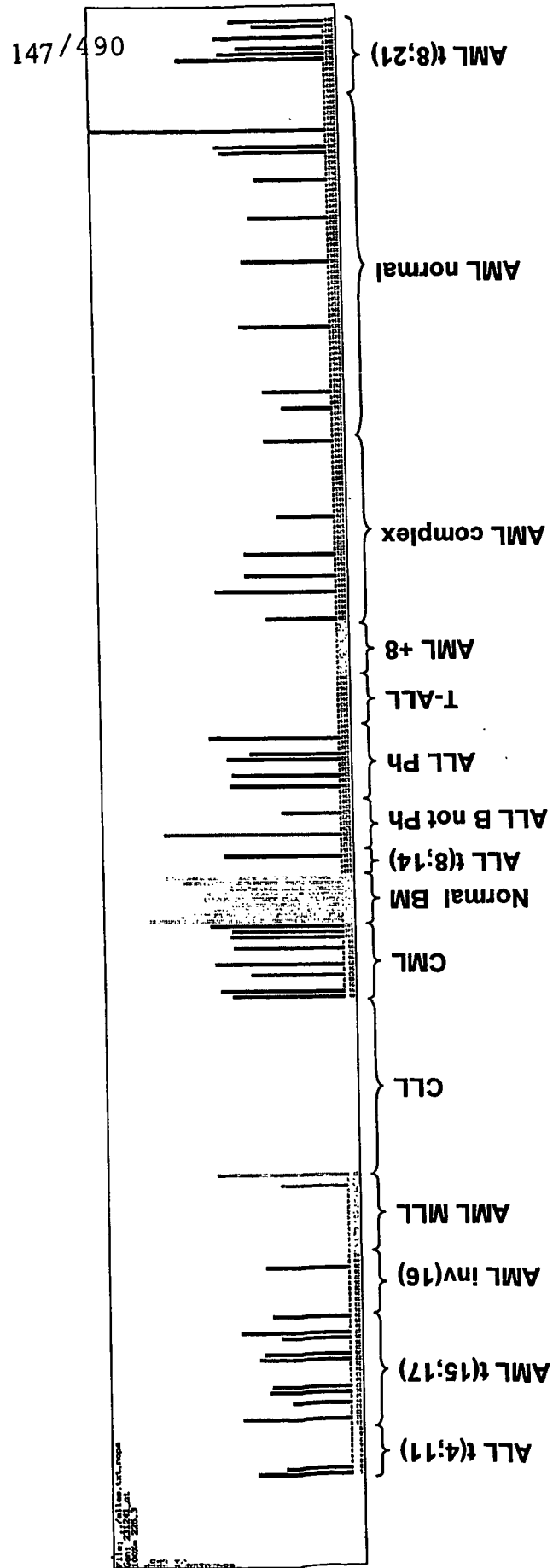


Figure 121

212531\_at, LCN2, normal BM vs. AML normal

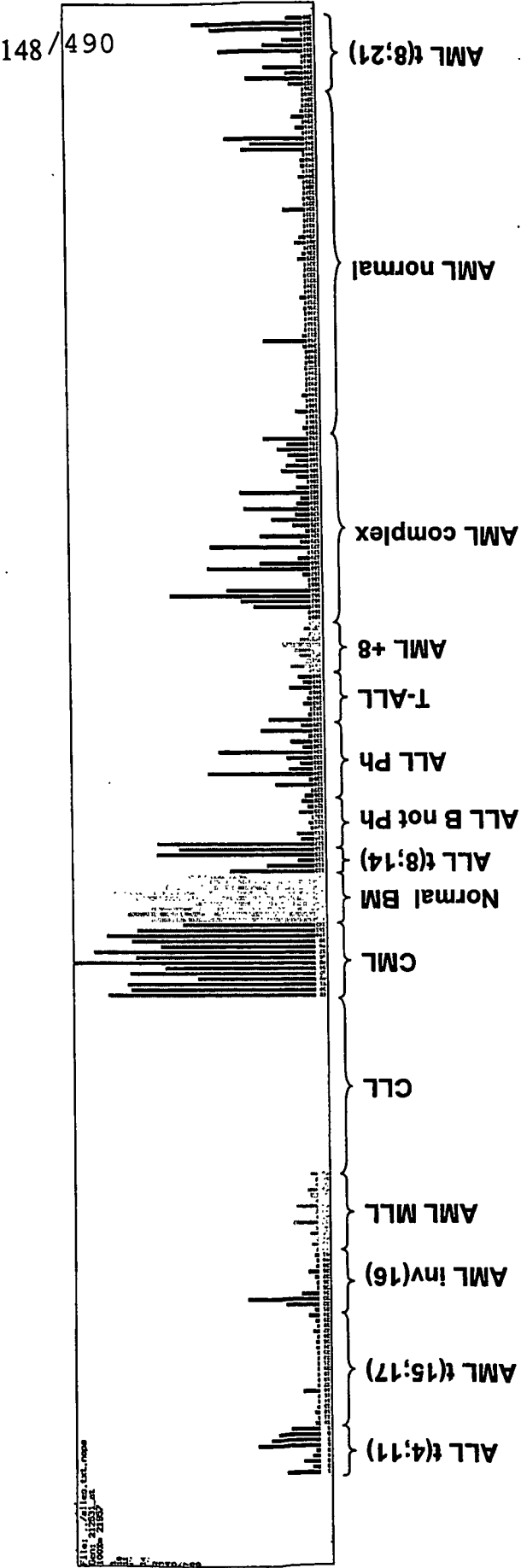


Figure 122



225792\_at, normal BM vs. AML t(8;21)

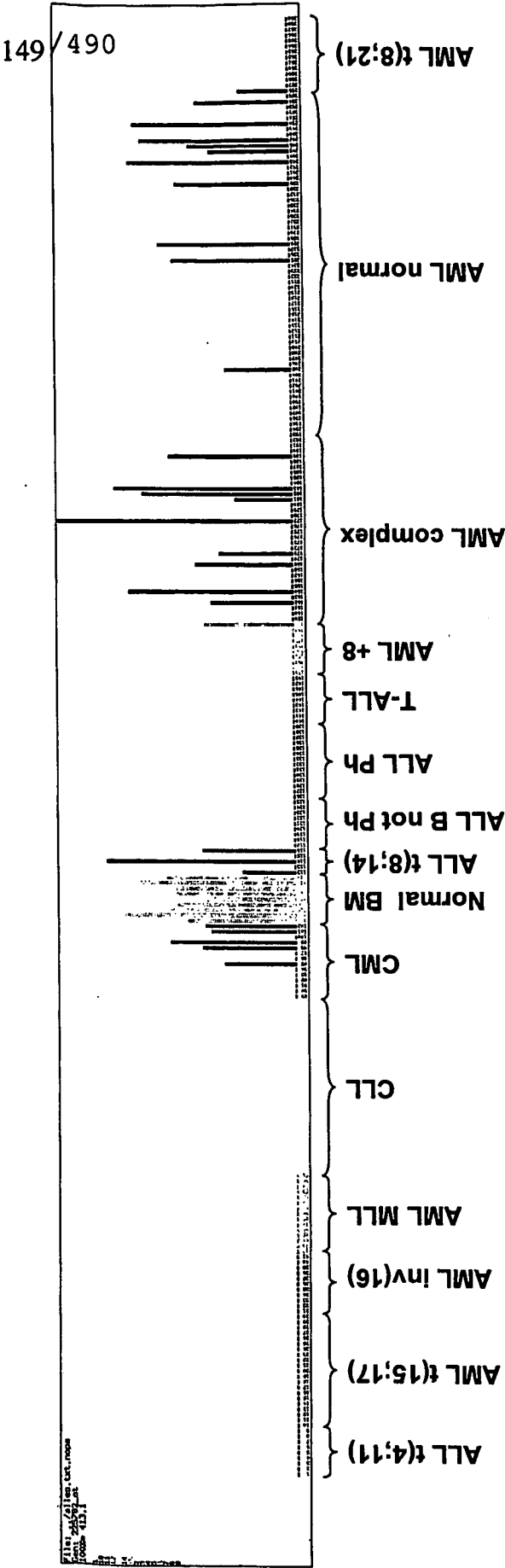
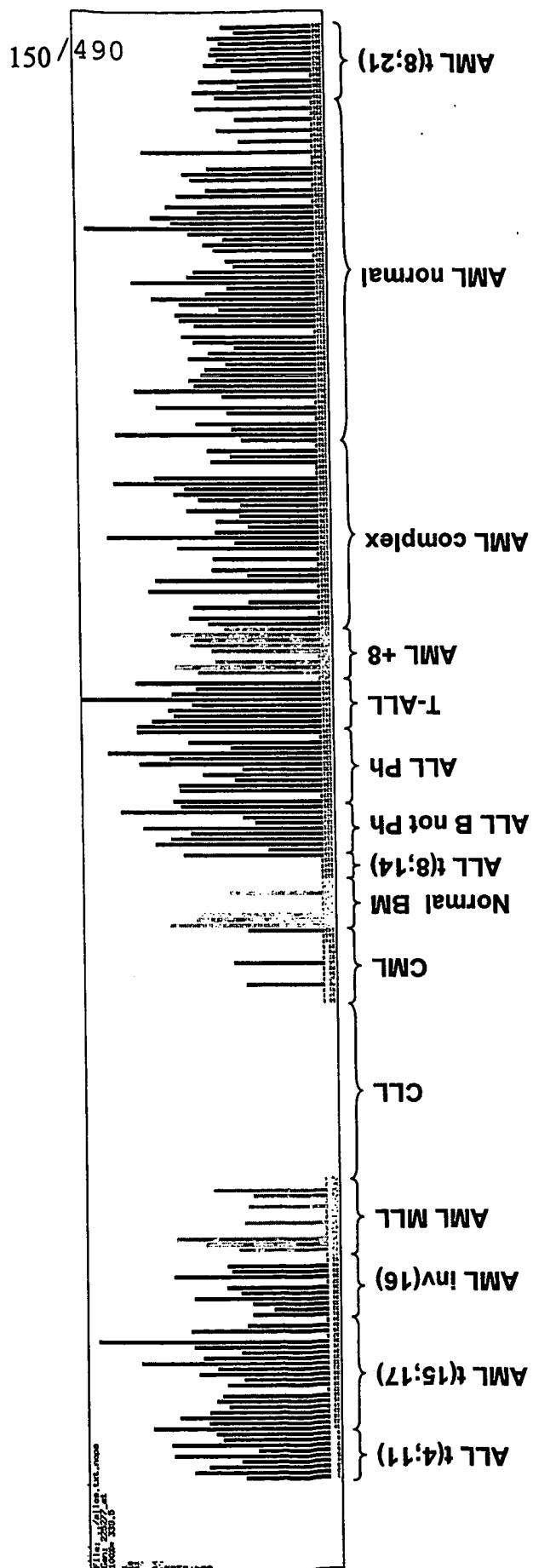


Figure 123

225277\_at, ALL t(8;14) vs. all others



**Figure 124**

# 214558\_at, GPR12, ALL t(8;14) vs. all others

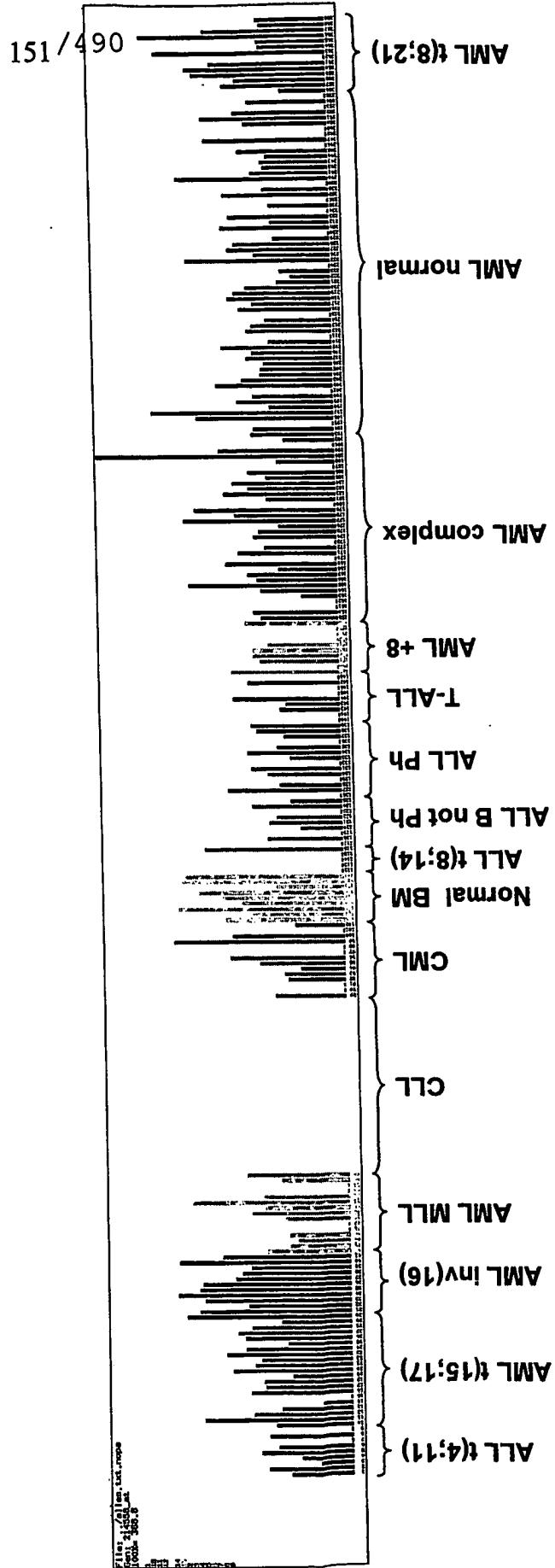


Figure 125

228211\_at, ALL t(8;14) vs. all others

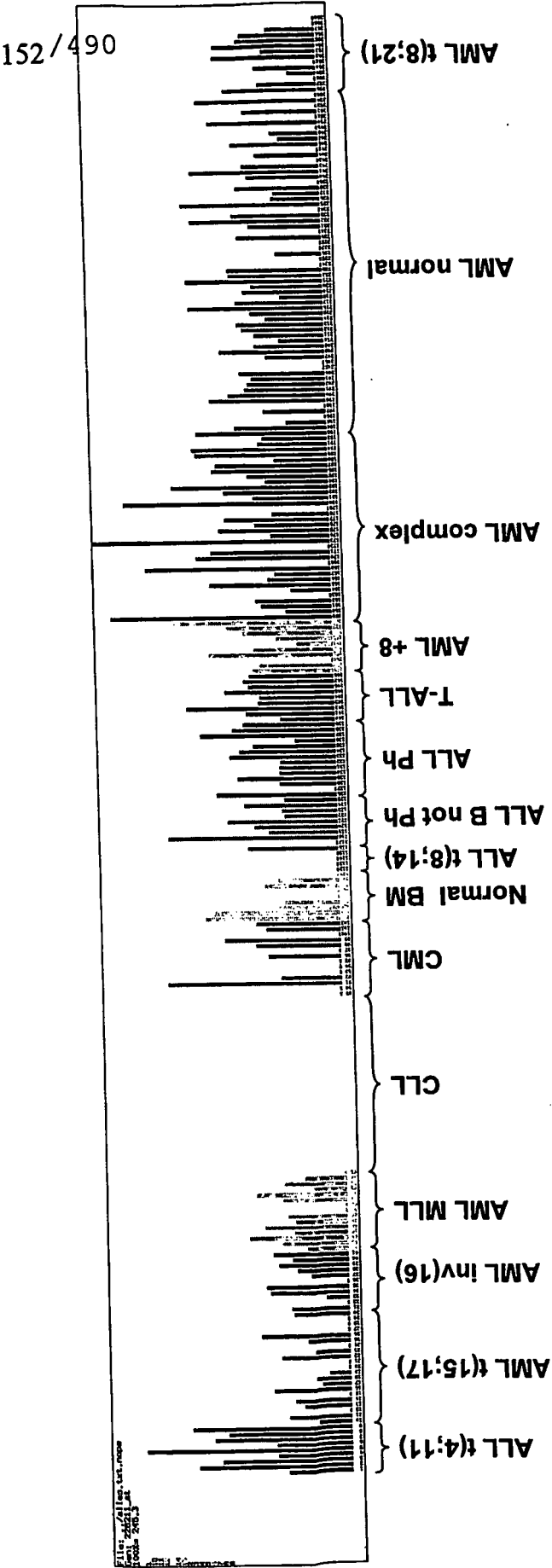


Figure 126

# 237864\_at, ALL t(8;14) vs. all others

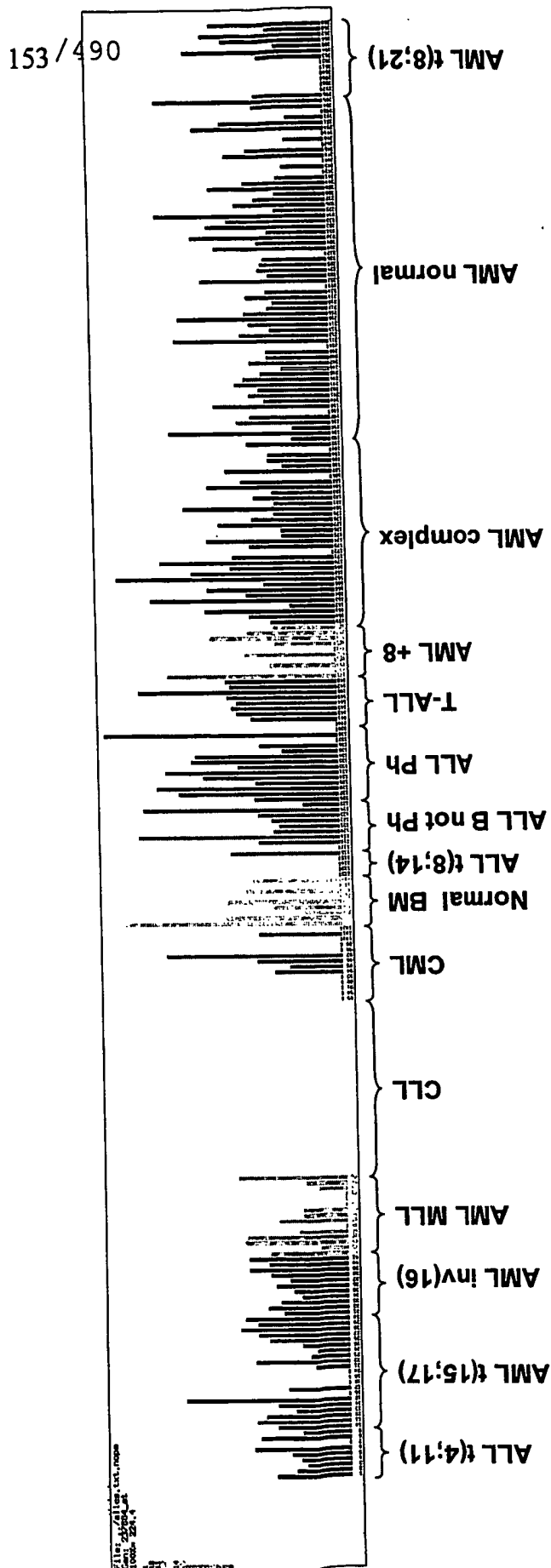


Figure 127

# 231567\_s\_at, TSP-NY, ALL t(8;14) vs. ALL B not Ph

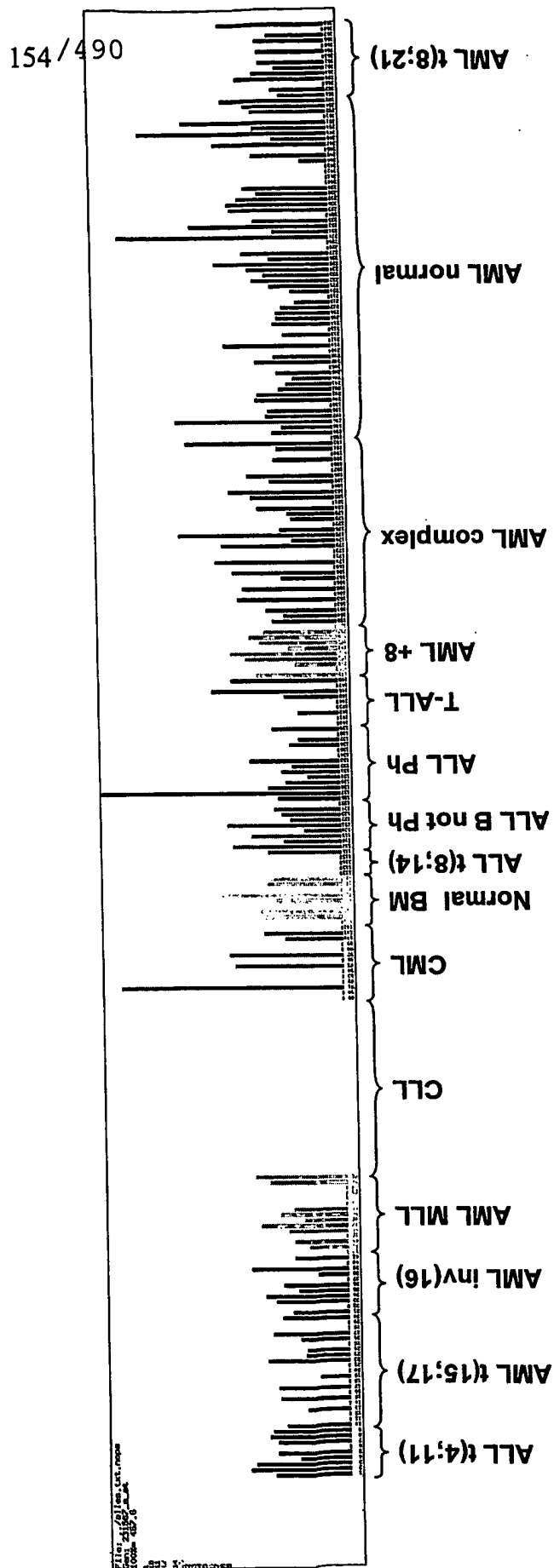
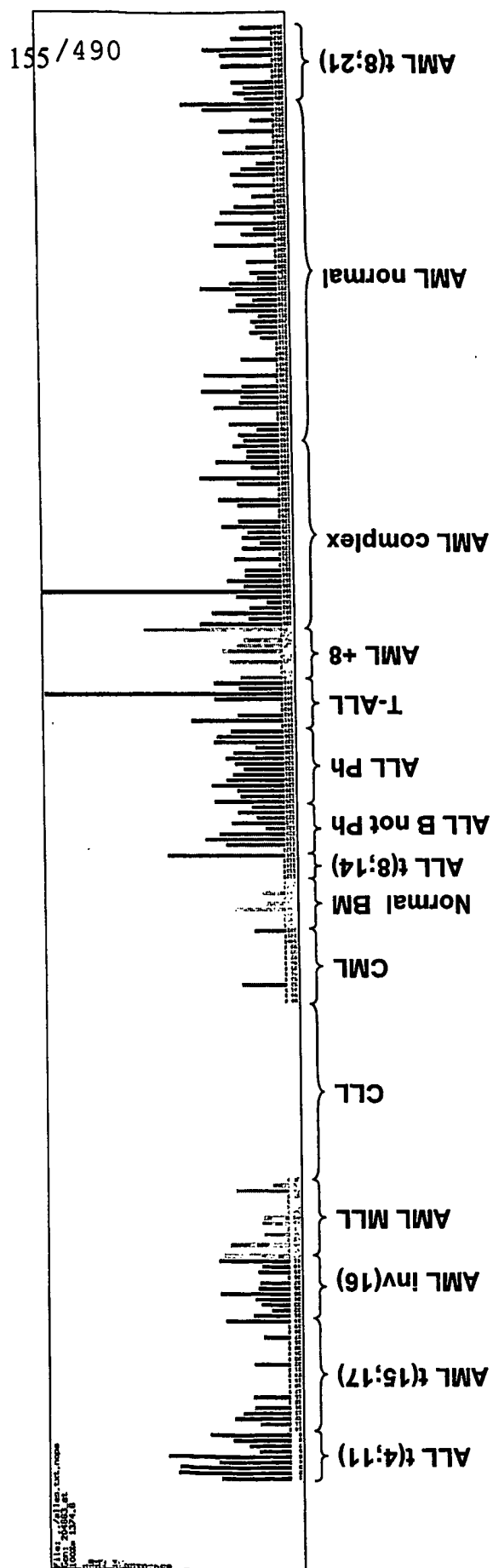


Figure 128

204663\_at, ME3, ALL t(8;14) vs. ALL Ph



**Figure 129**

213772\_s\_at, GGA2, ALL t(8;14) vs. T-ALL

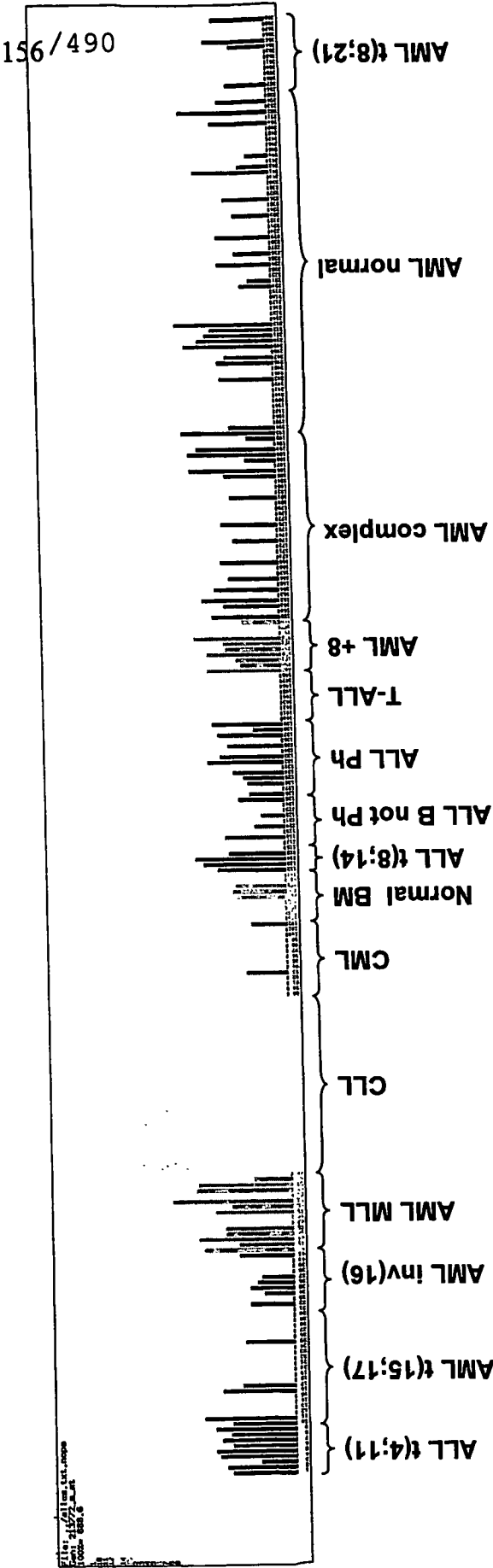


Figure 130



213159\_at, KIAA0805, ALL t(8;14) vs. AML +8

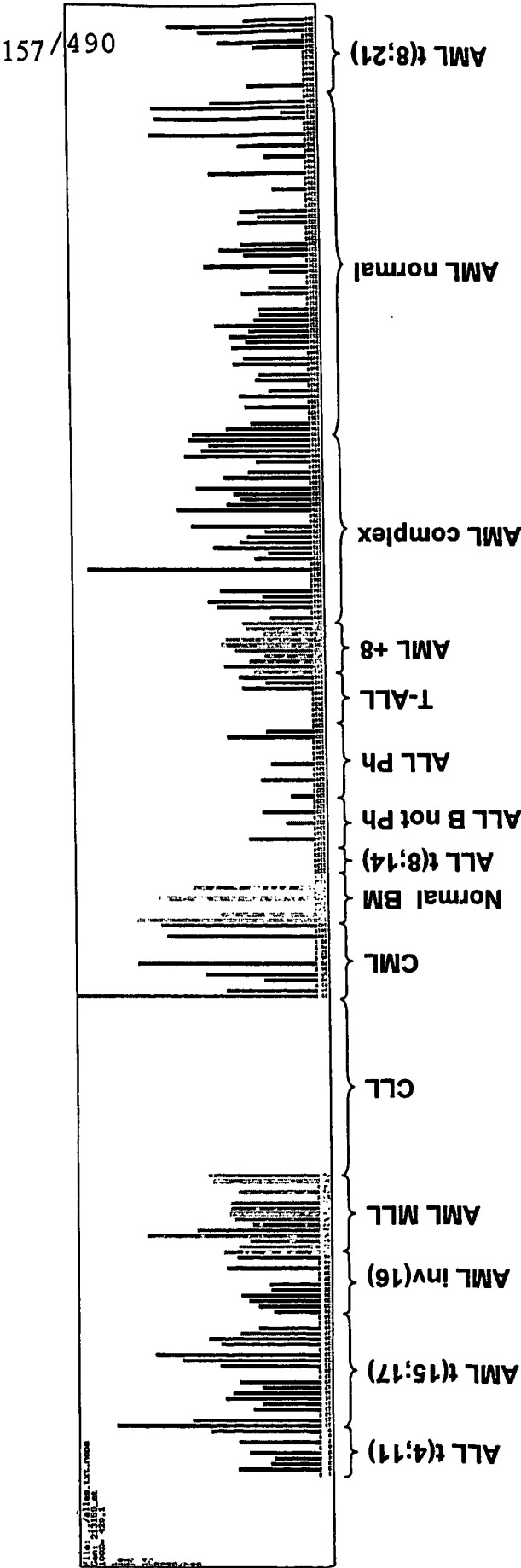


Figure 131

40148\_at, APBB2, ALL t(8;14) vs. AML complex

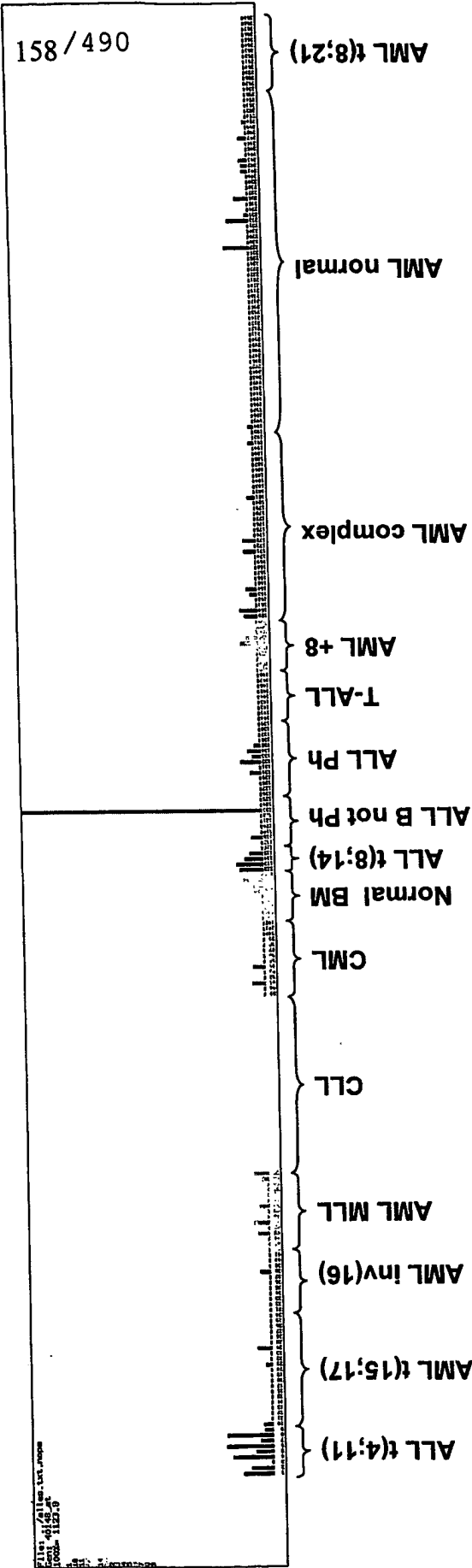


Figure 132

212293\_at, KIAA0630, ALL t(8;14) vs. AML complex

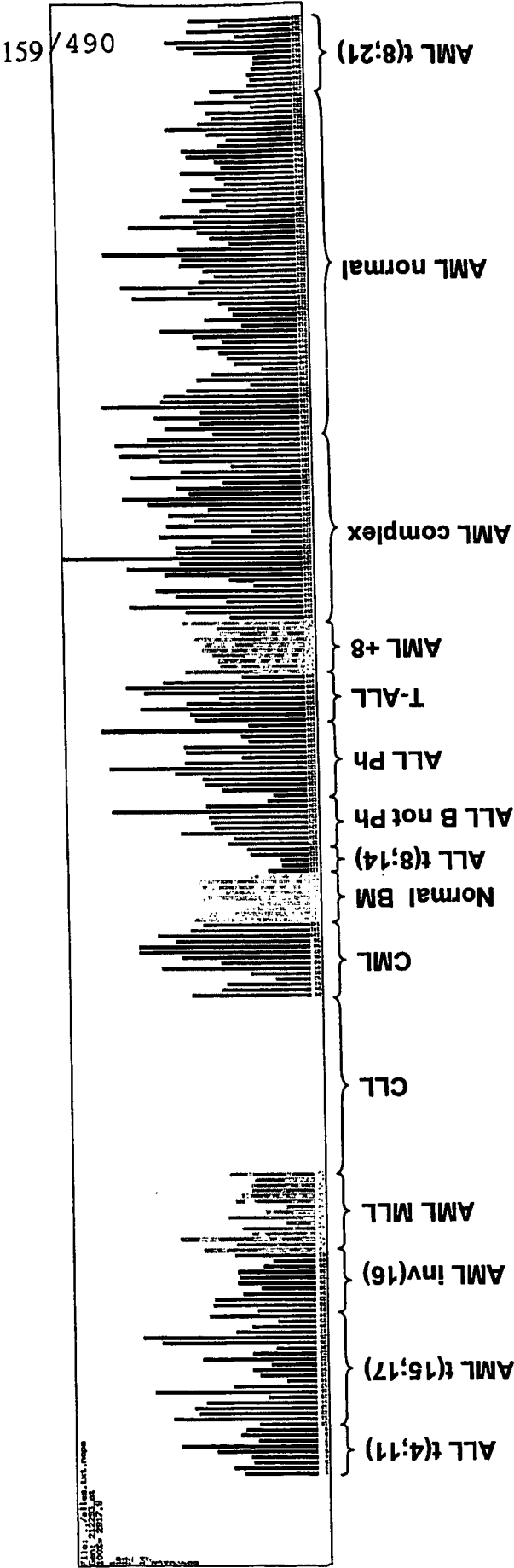


Figure 133

40148\_at, APBB2, ALL t(8;14) vs. AML normal

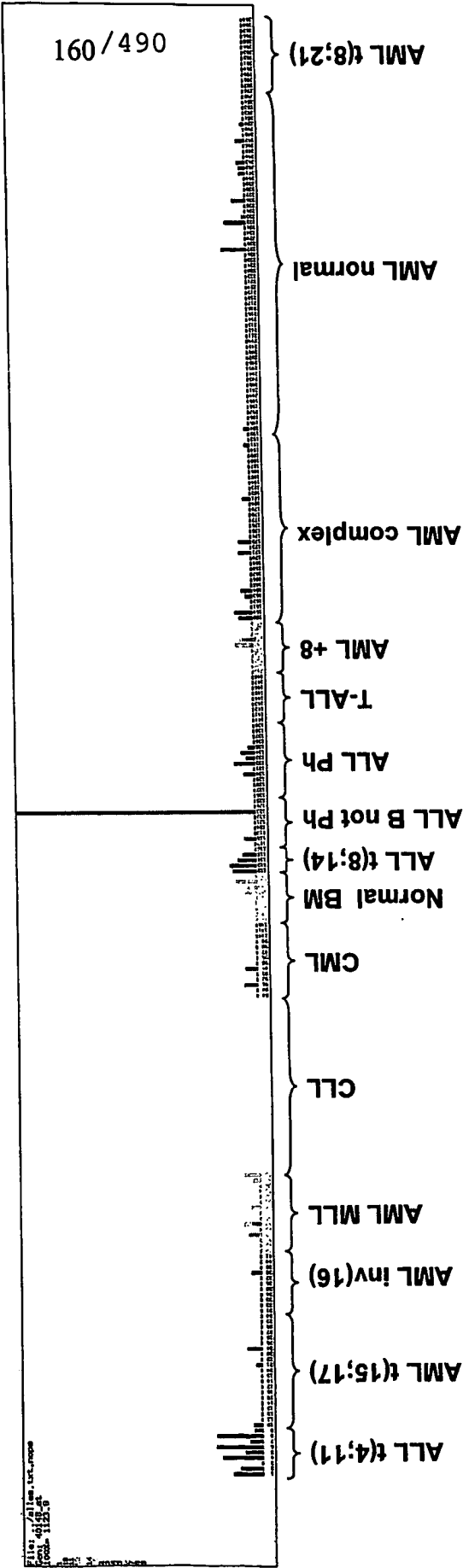


Figure 134

40148\_at, APBB2, ALL t(8;14) vs. AML t(8;21)

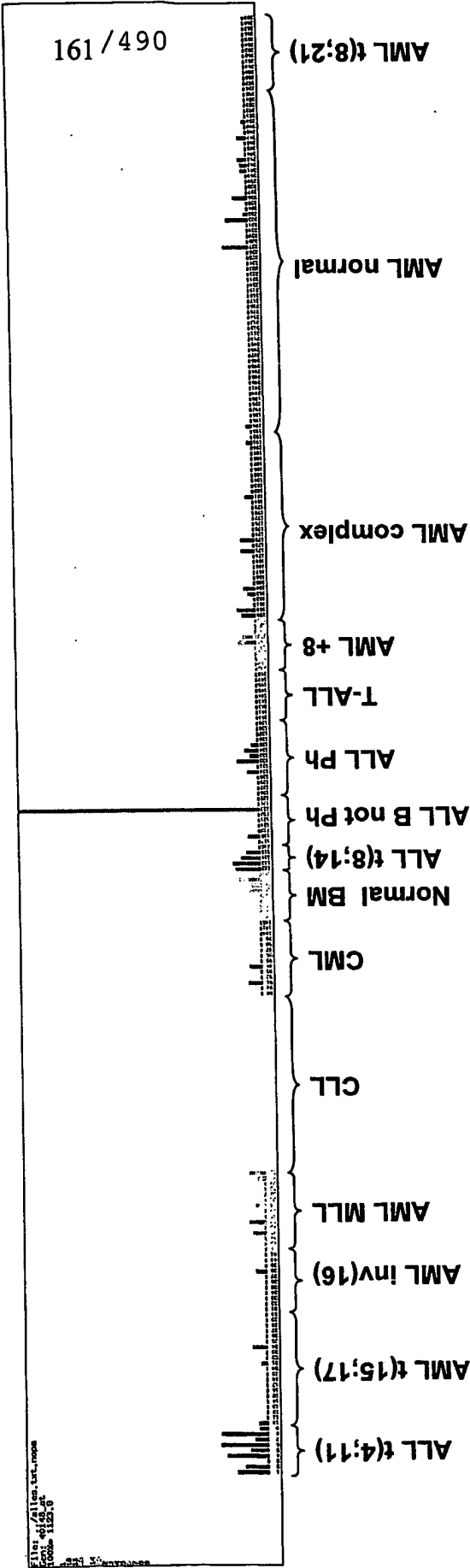


Figure 135

# 229487\_at, ALL B nicht Ph vs. all others

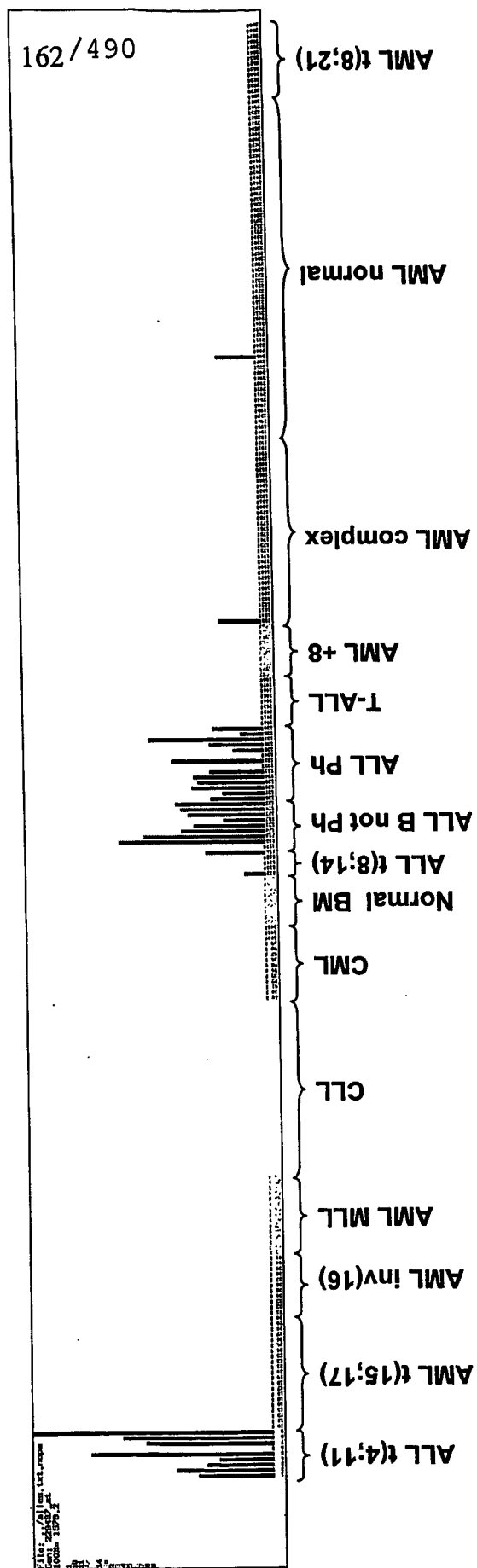


Figure 136

# 212592\_at, ALL B nicht Ph vs. all others

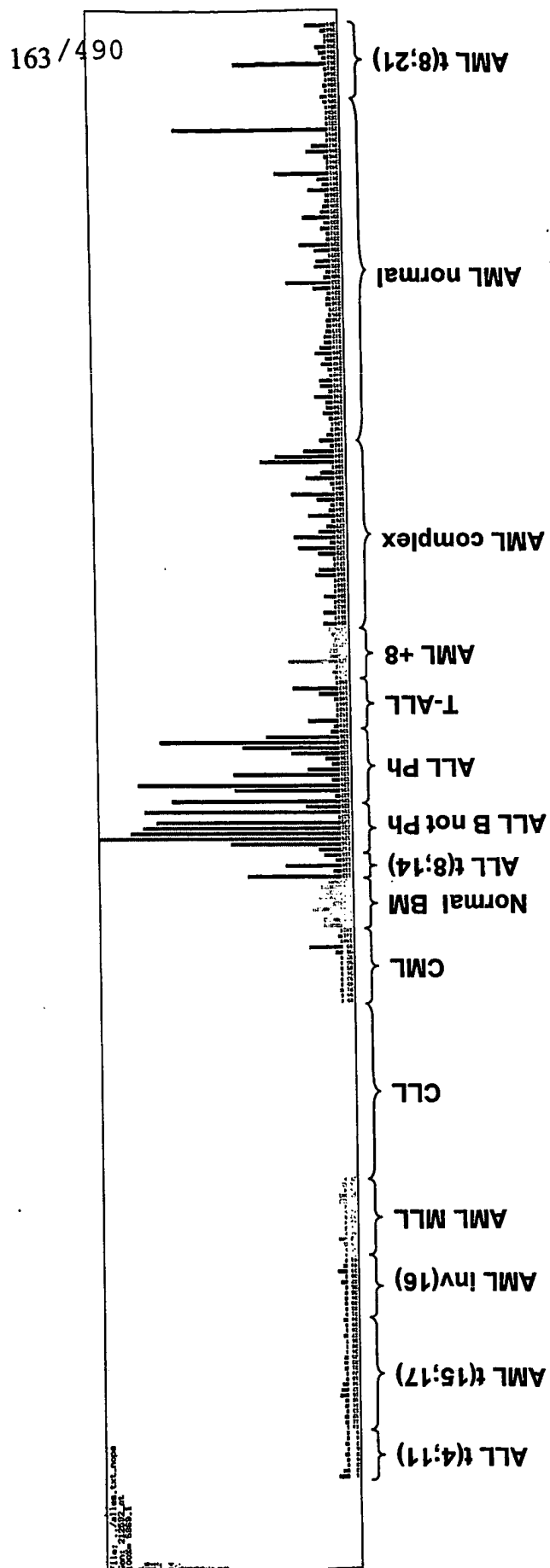


Figure 137

# 209197\_at, KIAA0080, ALL B not Ph vs. all others

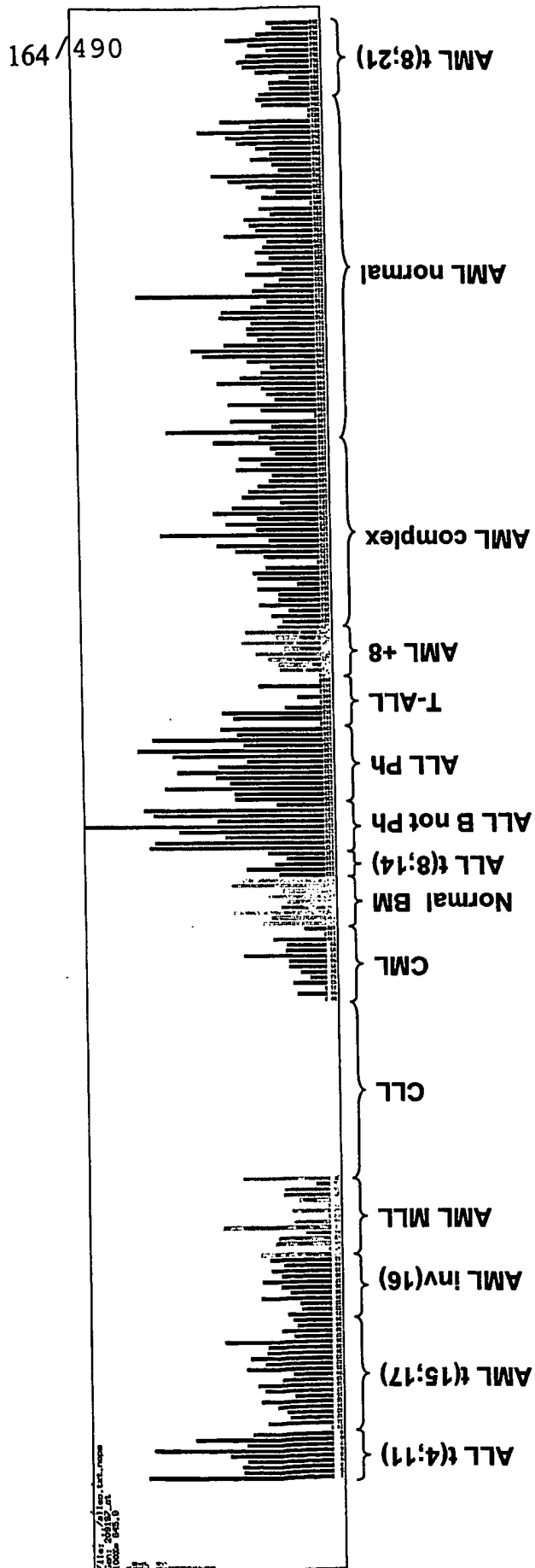


Figure 138



# 223469\_at, MGC10812, ALL B not Ph vs. all others

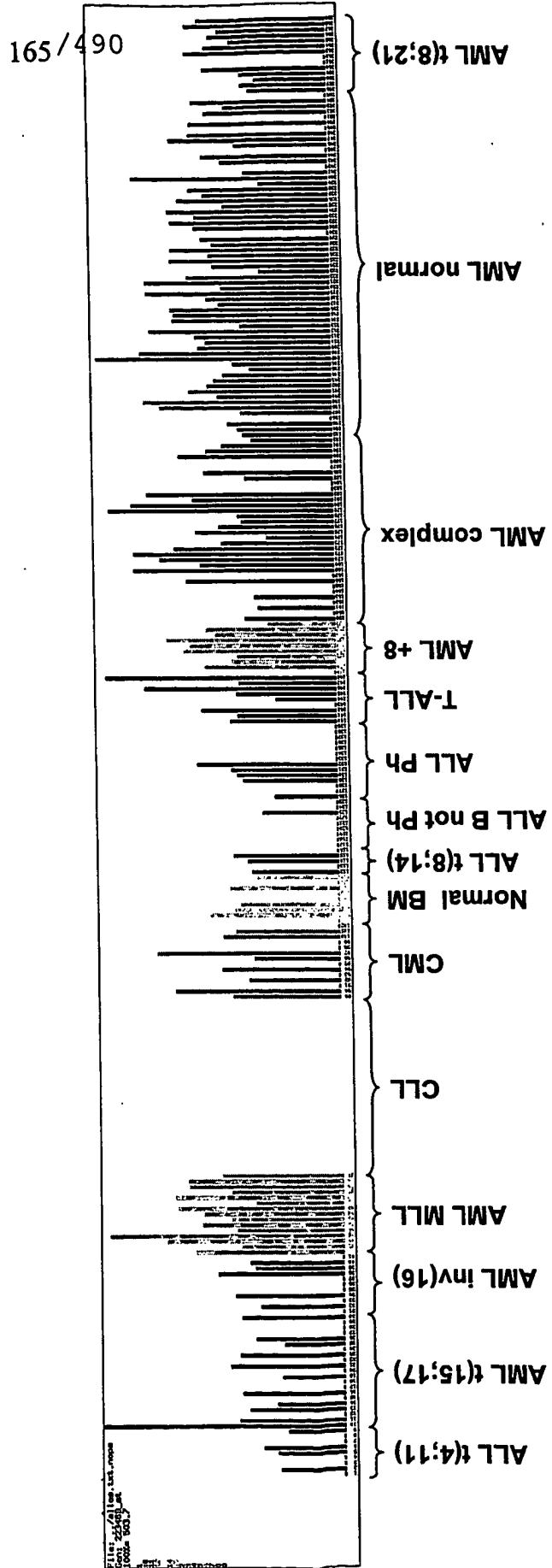


Figure 139

# 224739\_at, MG61, ALL B not Ph vs. all others

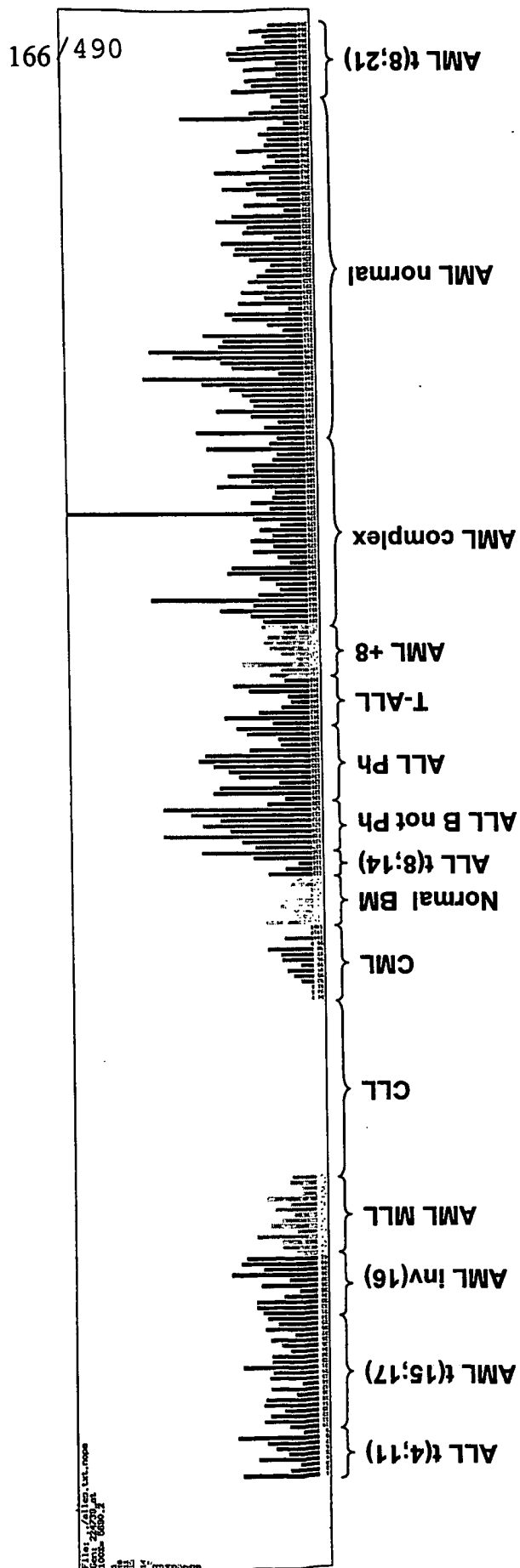


Figure 140

# 218351\_at, FLJ20502, ALL B not Ph vs. all others

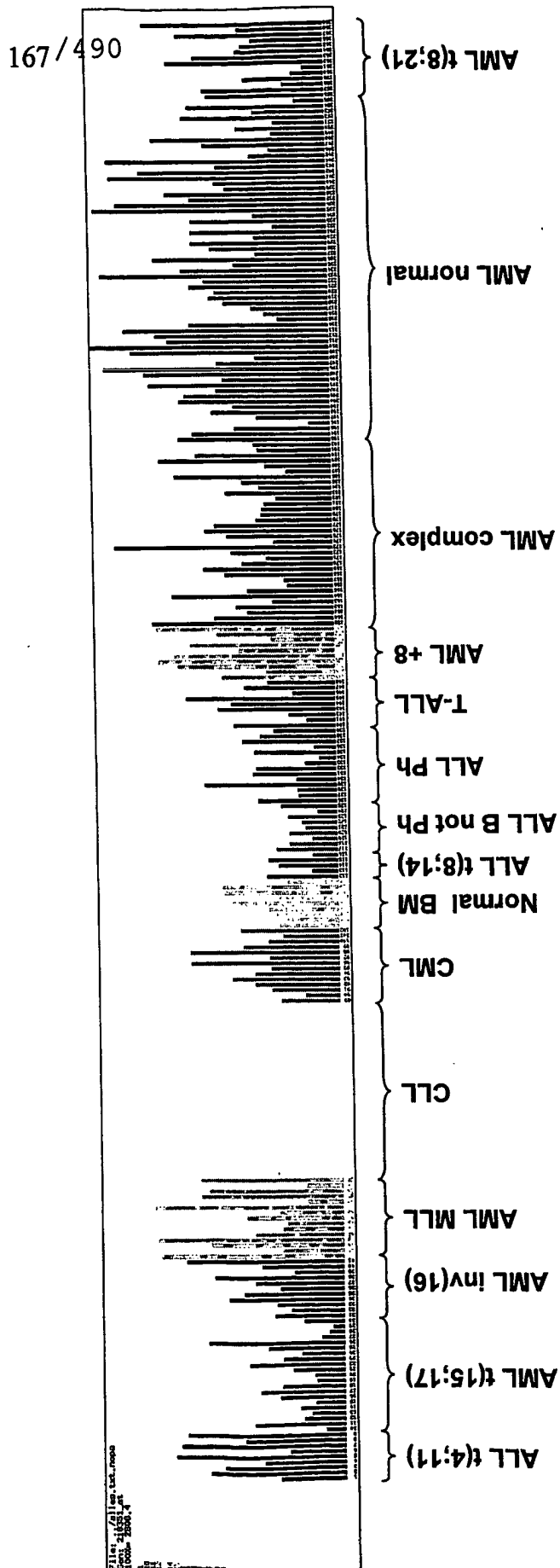


Figure 141

# 220744\_s\_at, WDR10, ALL B not Ph vs. all others

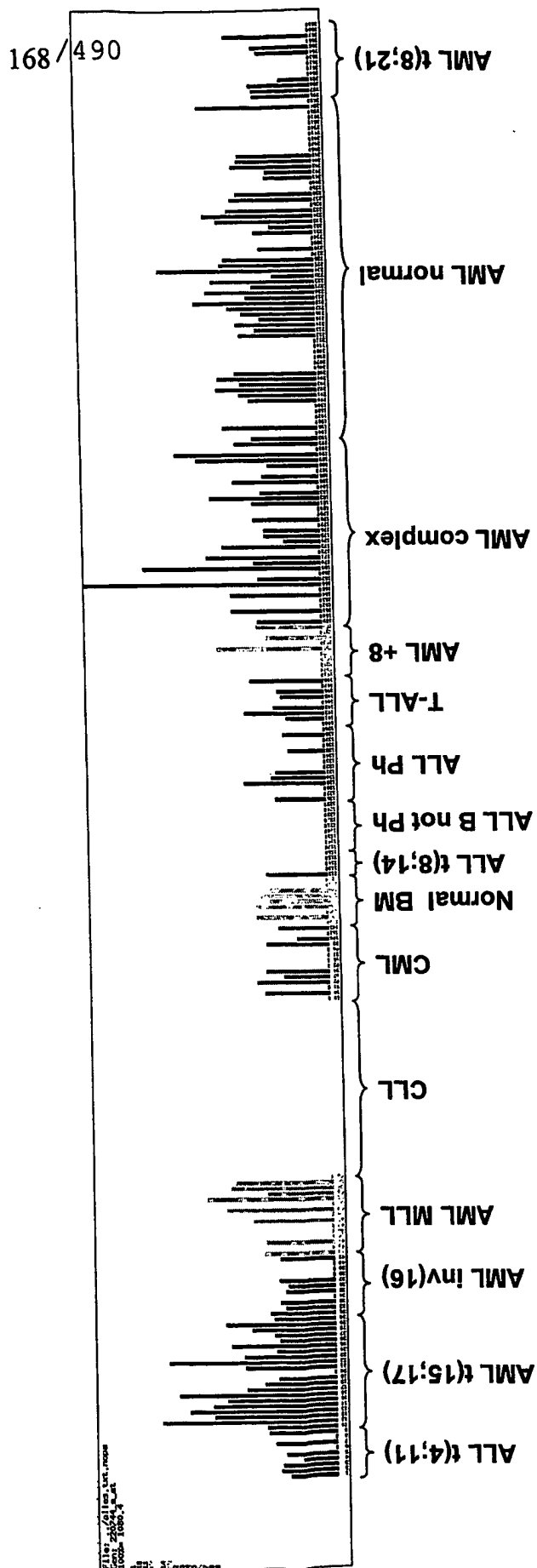


Figure 142

# 213582\_at, ATP11A, ALL B not Ph vs. all others

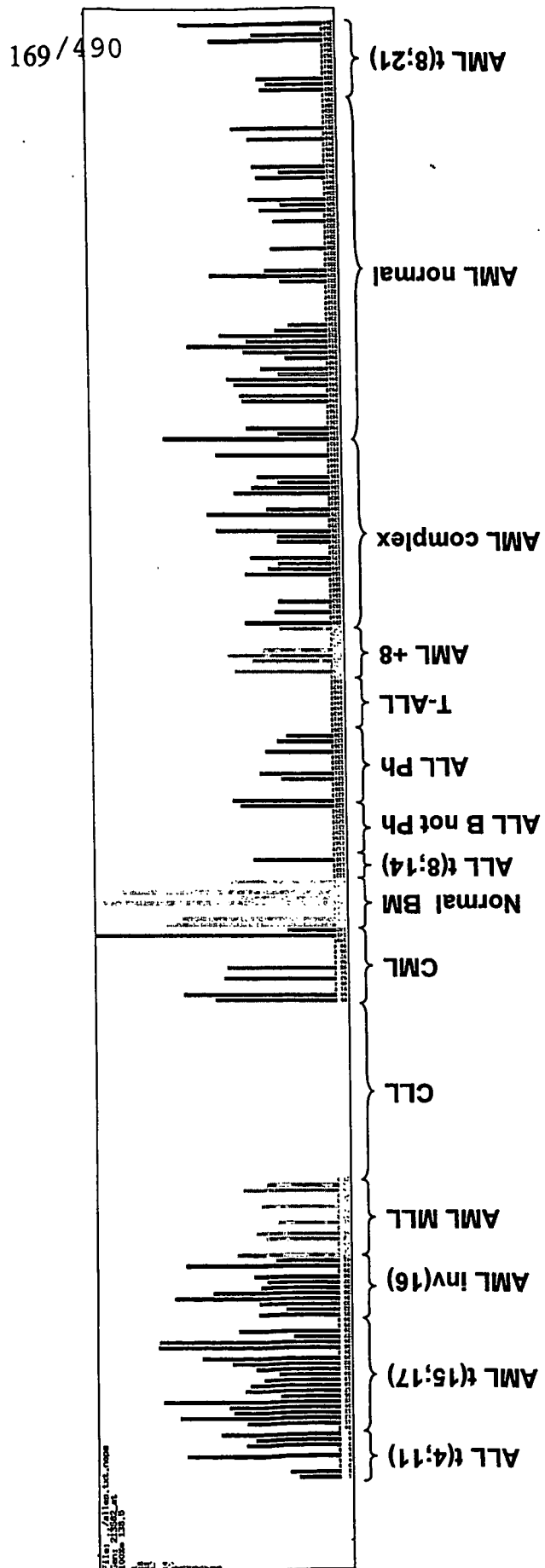


Figure 143

219615\_s\_at, KCNK5, ALL B not Ph vs. all others

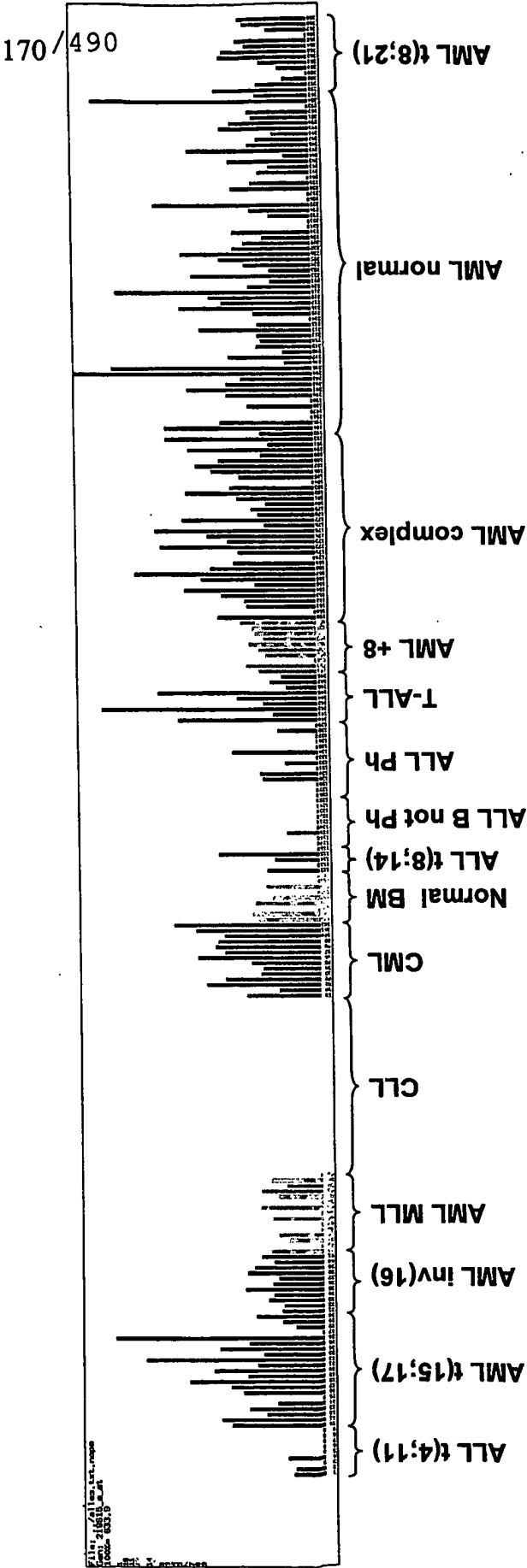


Figure 144

# 202123\_s\_at, ABL1, ALL B not Ph vs. ALL Ph

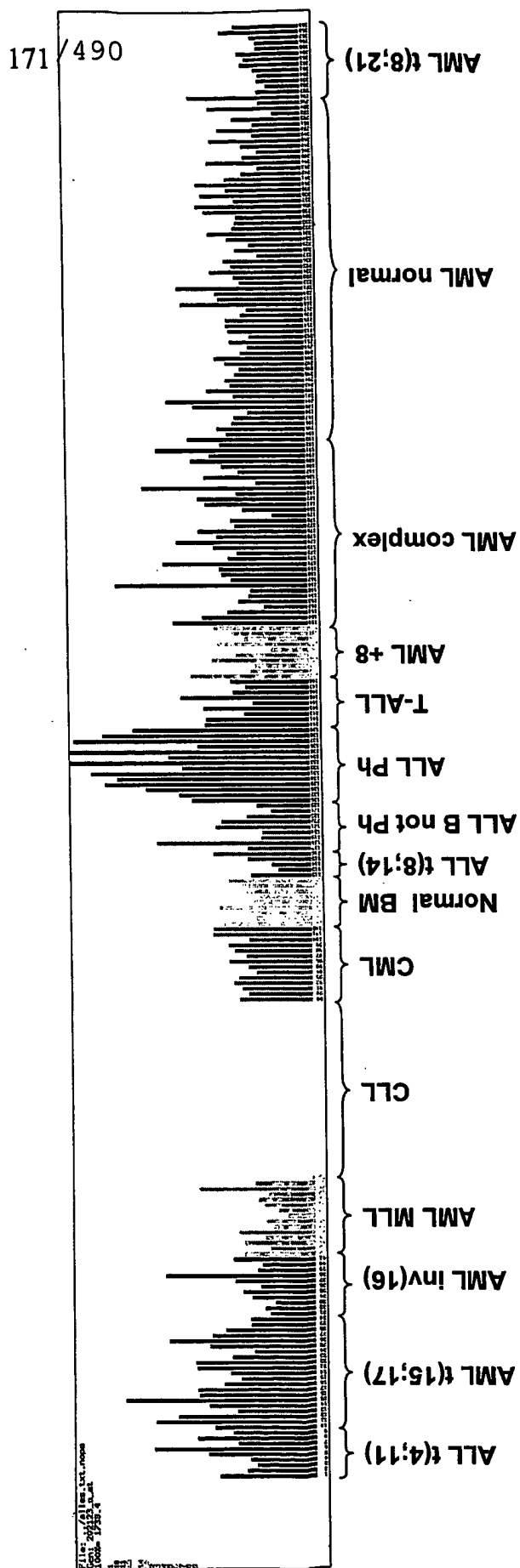


Figure 145

242292\_at, ALL B not Ph vs. T-ALL

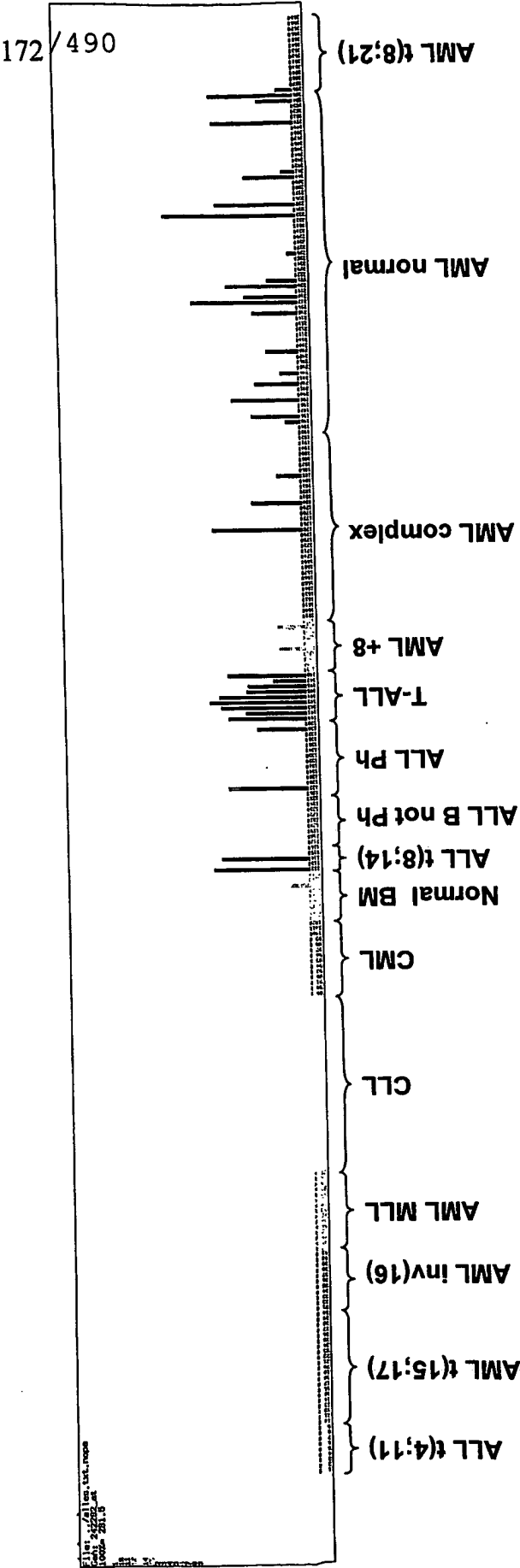


Figure 146



# 208248\_x\_at, APLP2, ALL B not Ph vs. AML +8

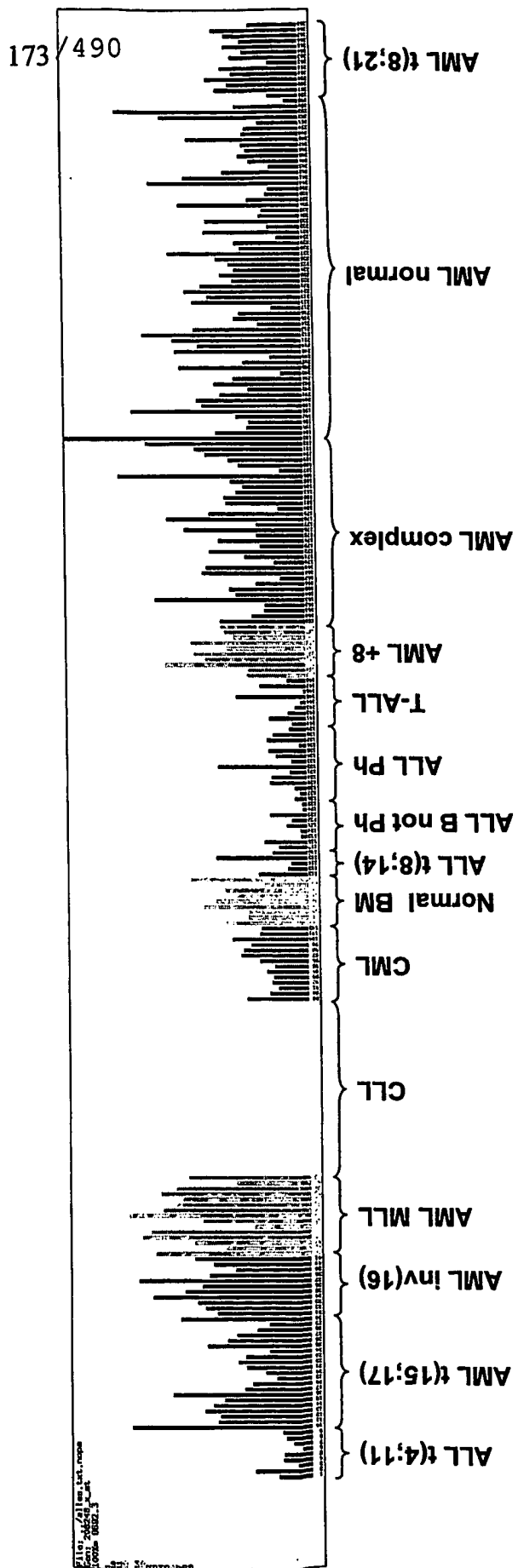


Figure 147

218168\_s\_at, CABBC1, ALL B not Ph vs. AML complex

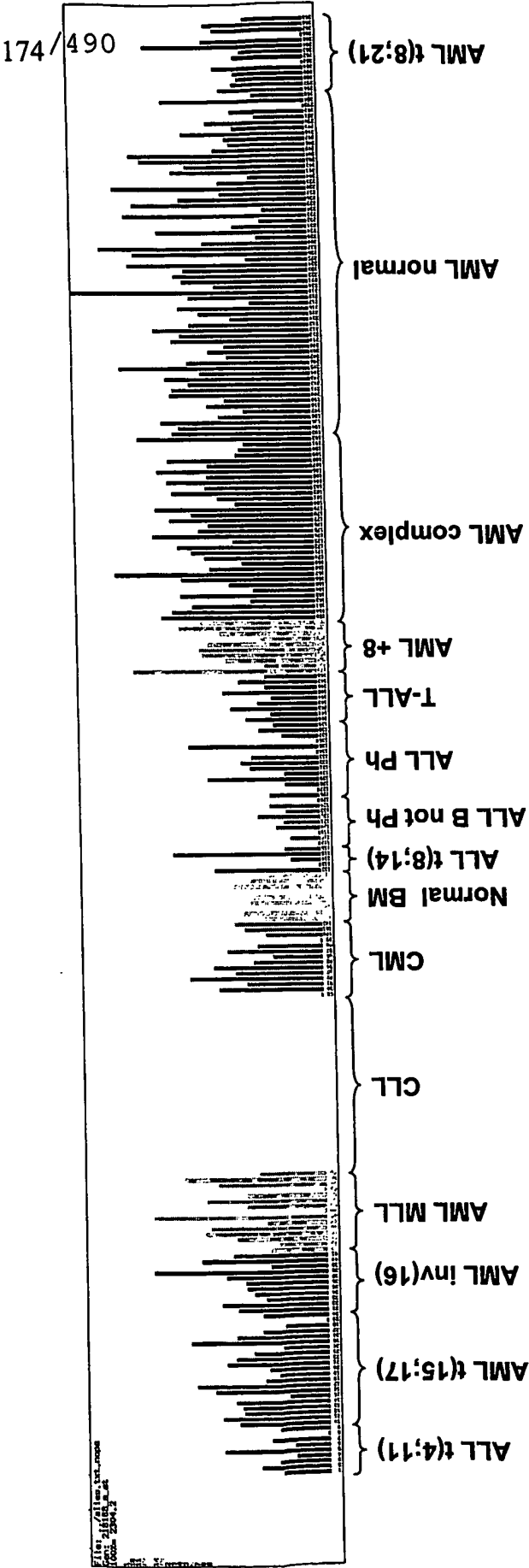


Figure 148

# 221969\_at, PAX5, ALL B not Ph vs. AML normal

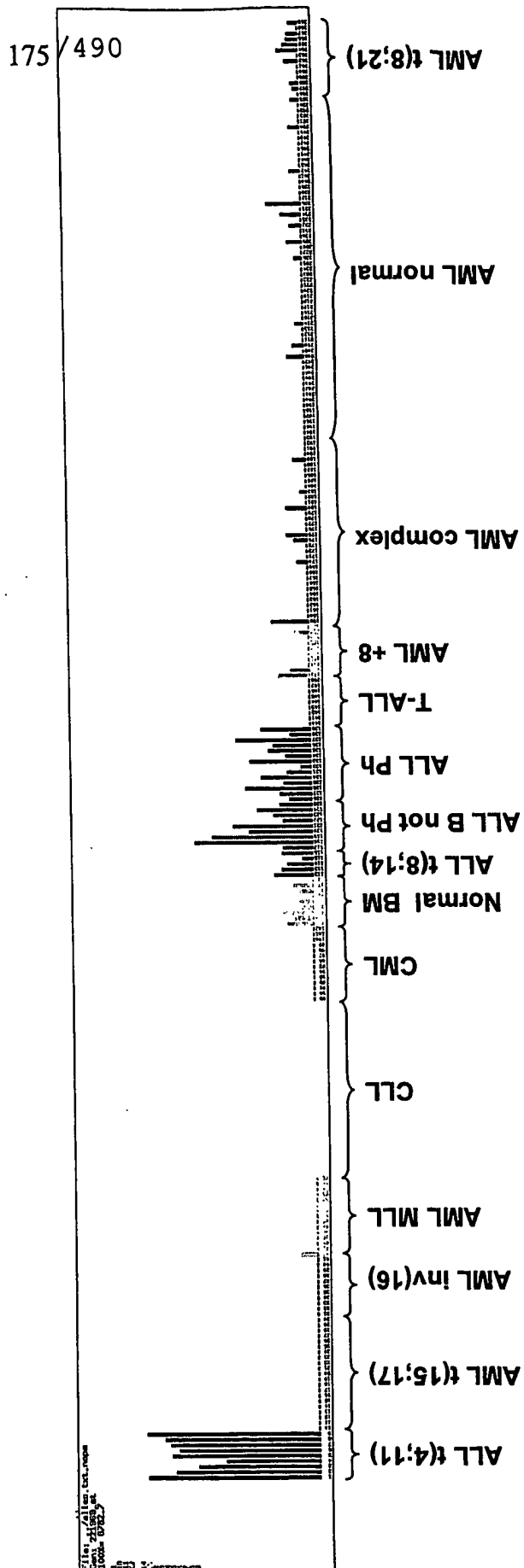


Figure 149

# 202382\_s\_at, GNPI, ALL B not Ph vs. AML t(8;21)

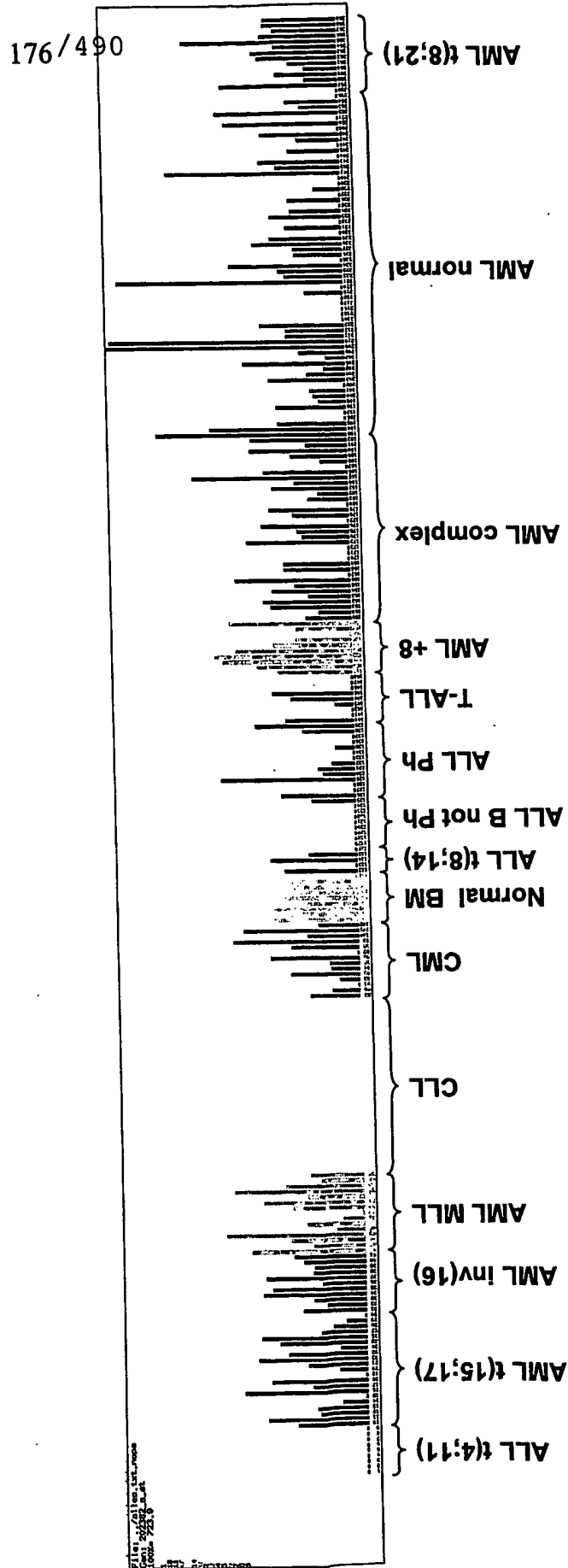


Figure 150

227998\_at, MGC17528, ALL Ph vs. all others

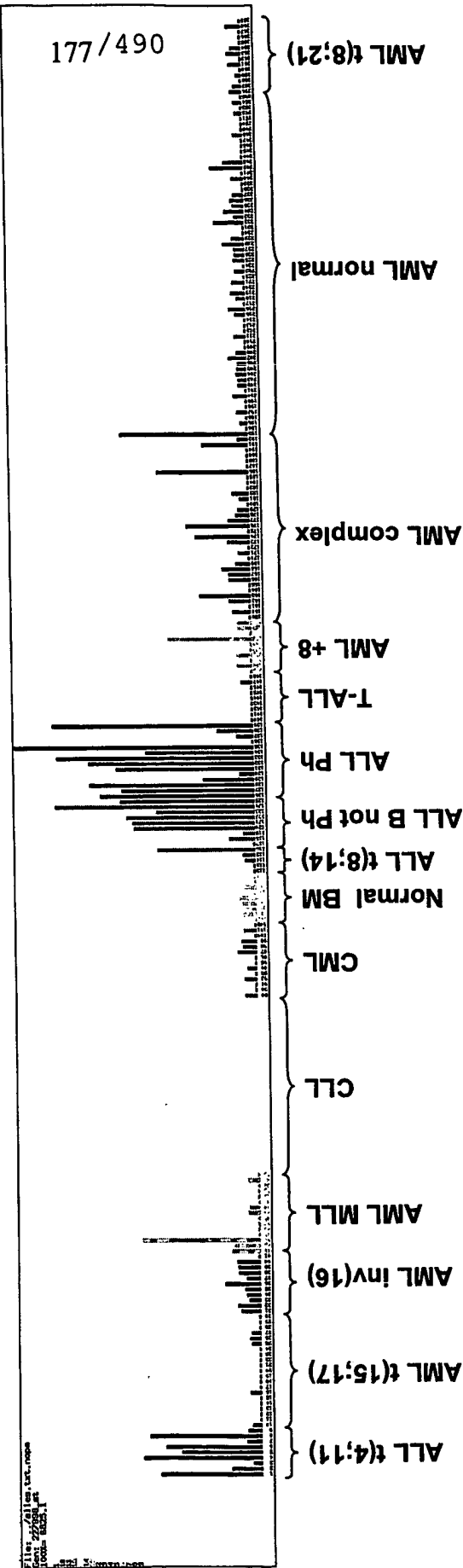


Figure 151

221969\_at, PAX5, ALL Ph vs. T-ALL

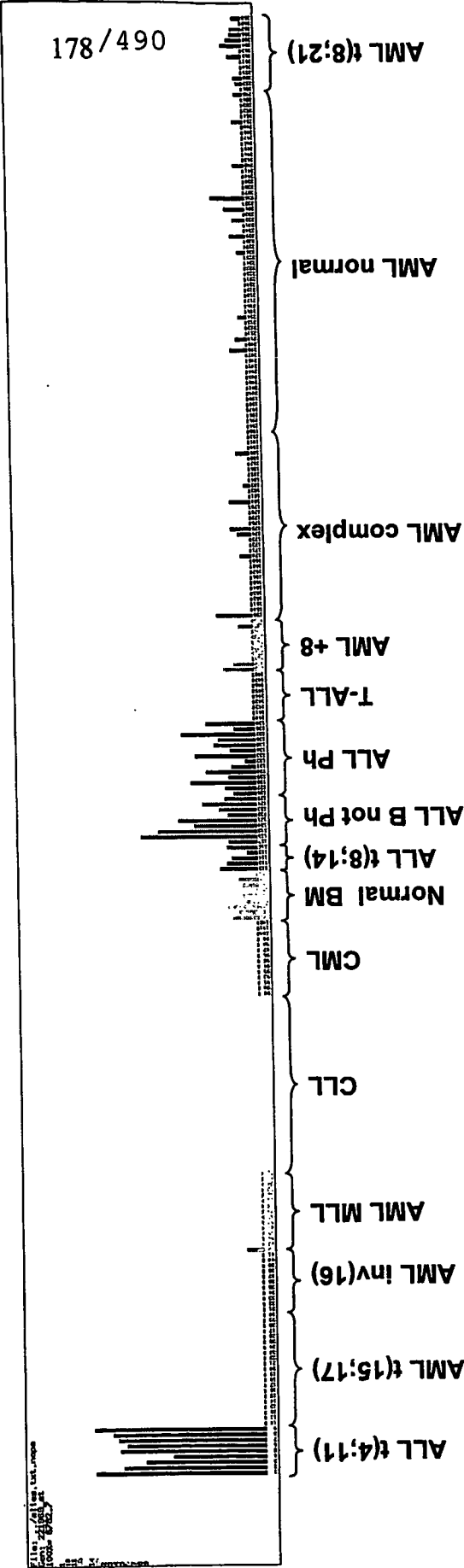


Figure 152

# 234107\_s\_at, ALL Ph vs. AML +8

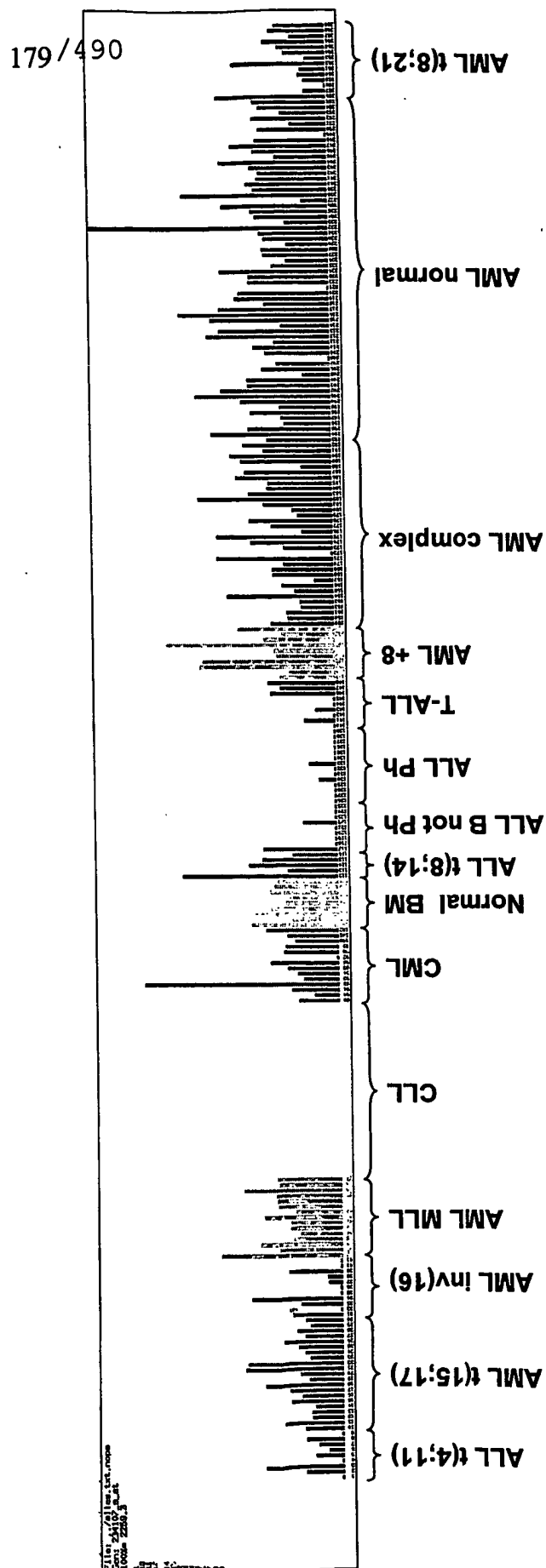


Figure 153

# 214641\_s\_at, HOXA9, ALL Ph vs. AML complex

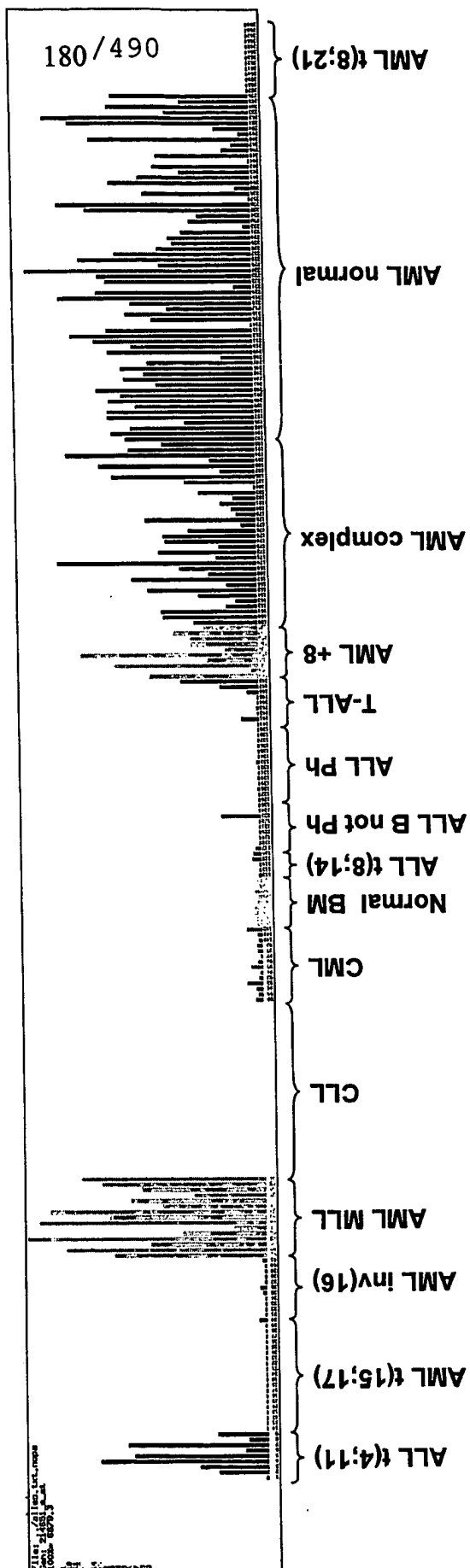


Figure 154



214641\_s\_at, HOXA9, ALL Ph vs. AML normal

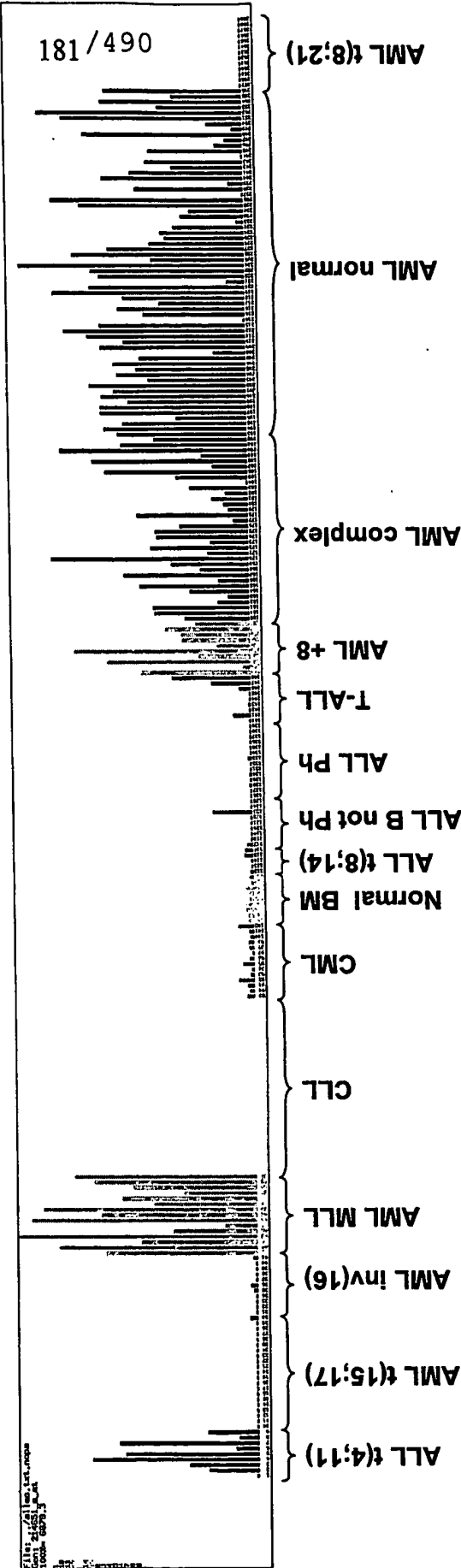


Figure 155

212013\_at, D2S448, ALL Ph vs. AML normal

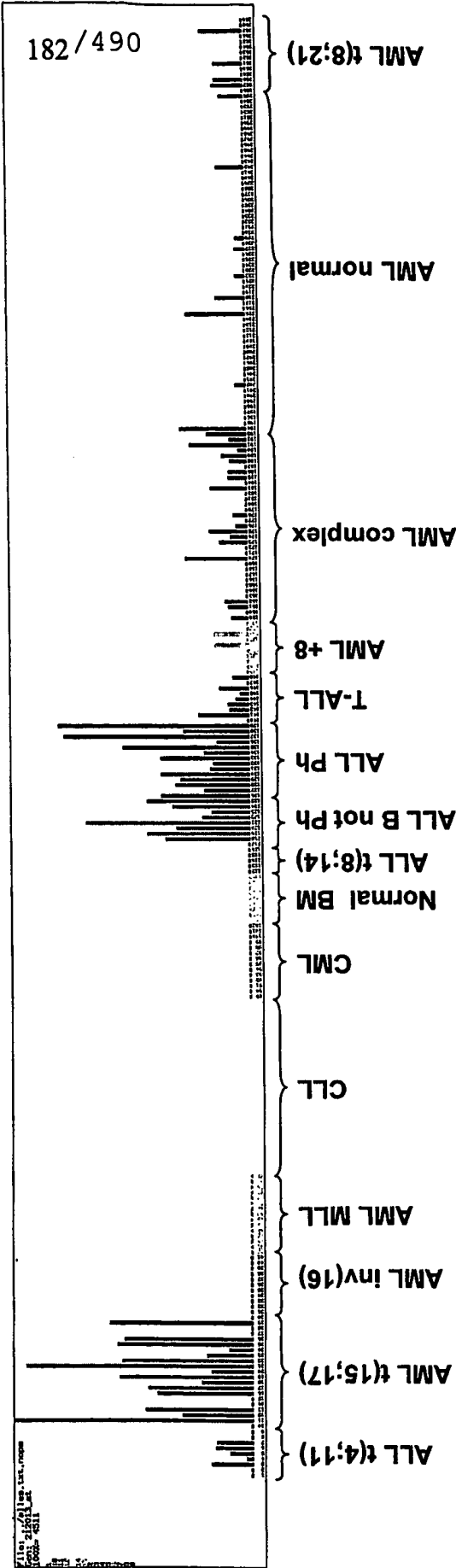
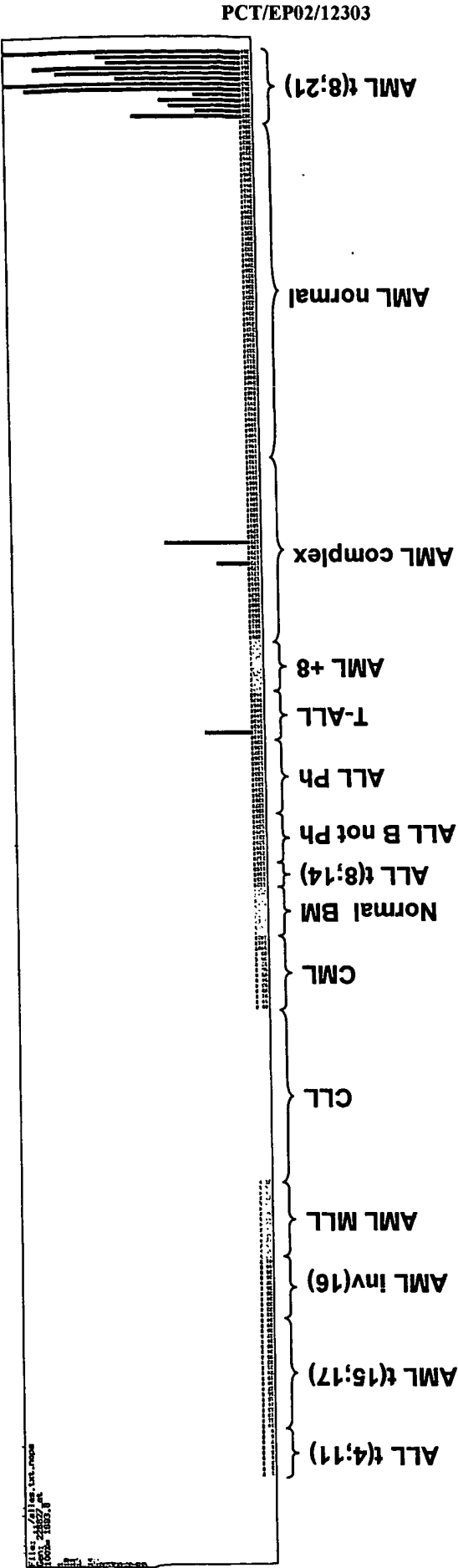


Figure 156

228827\_at, ALL Ph vs. AML t(8;21)

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Figure 157



# 209604\_s\_at, GATA3, T-ALL vs. all others

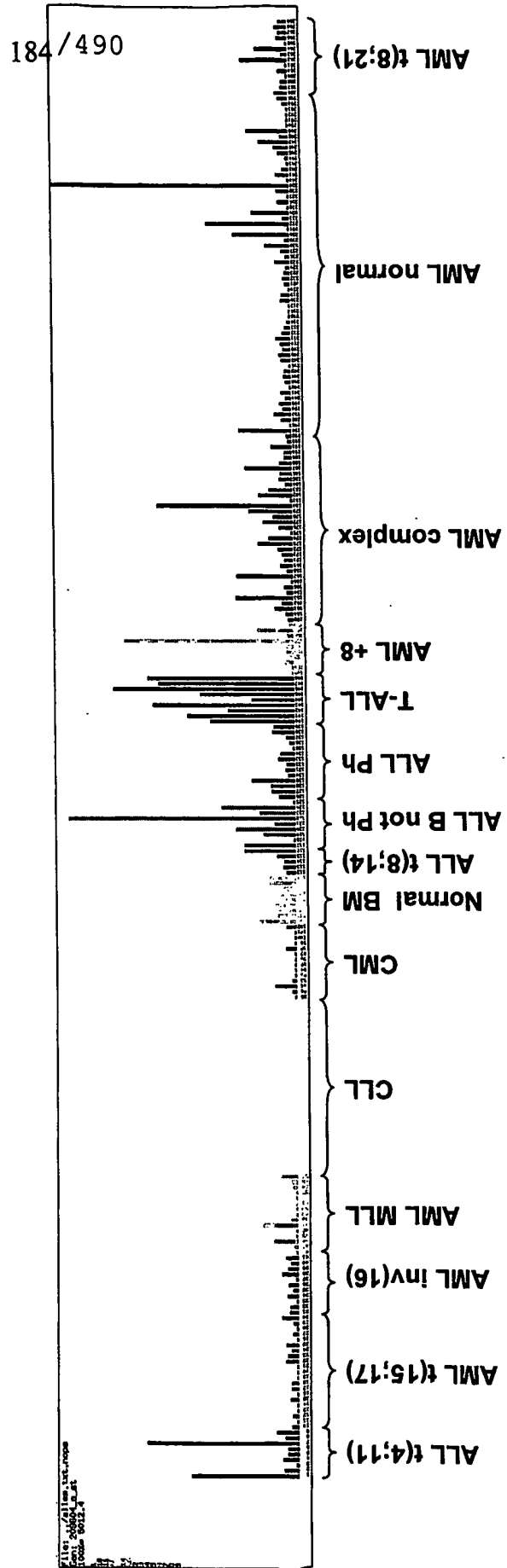


Figure 158

# 233589\_x\_at, T-ALL vs. all others

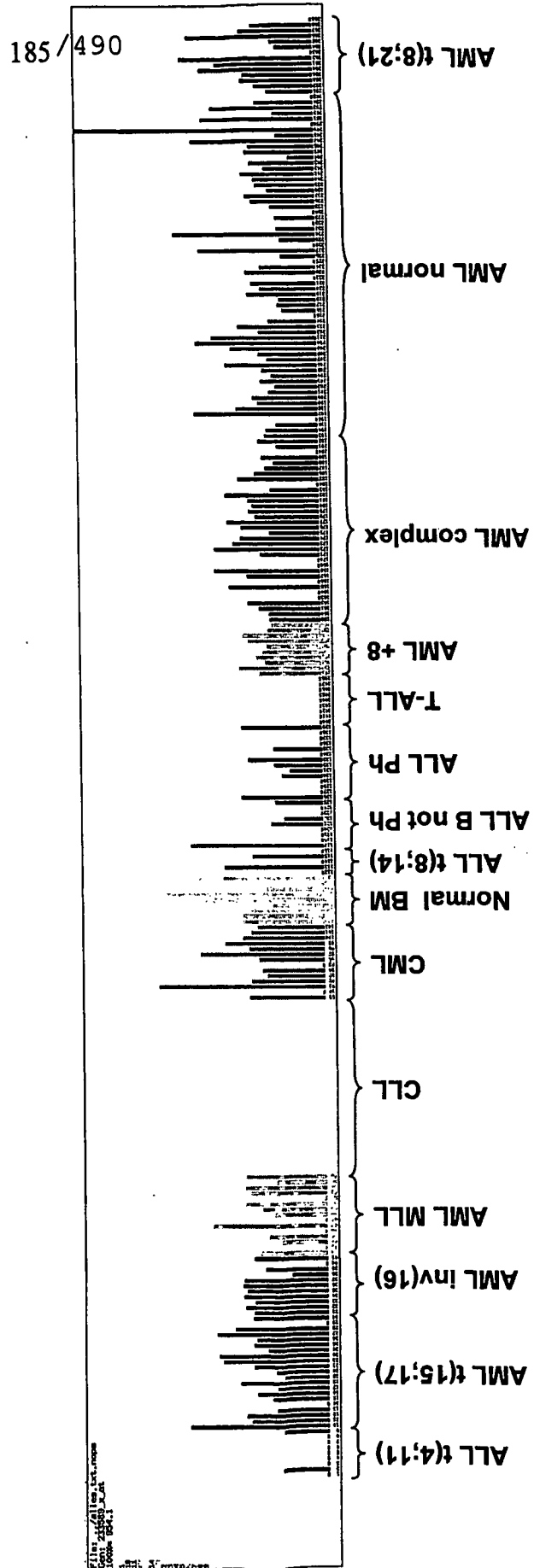


Figure 159

# 233589\_x\_at, T-ALL vs. AML +8

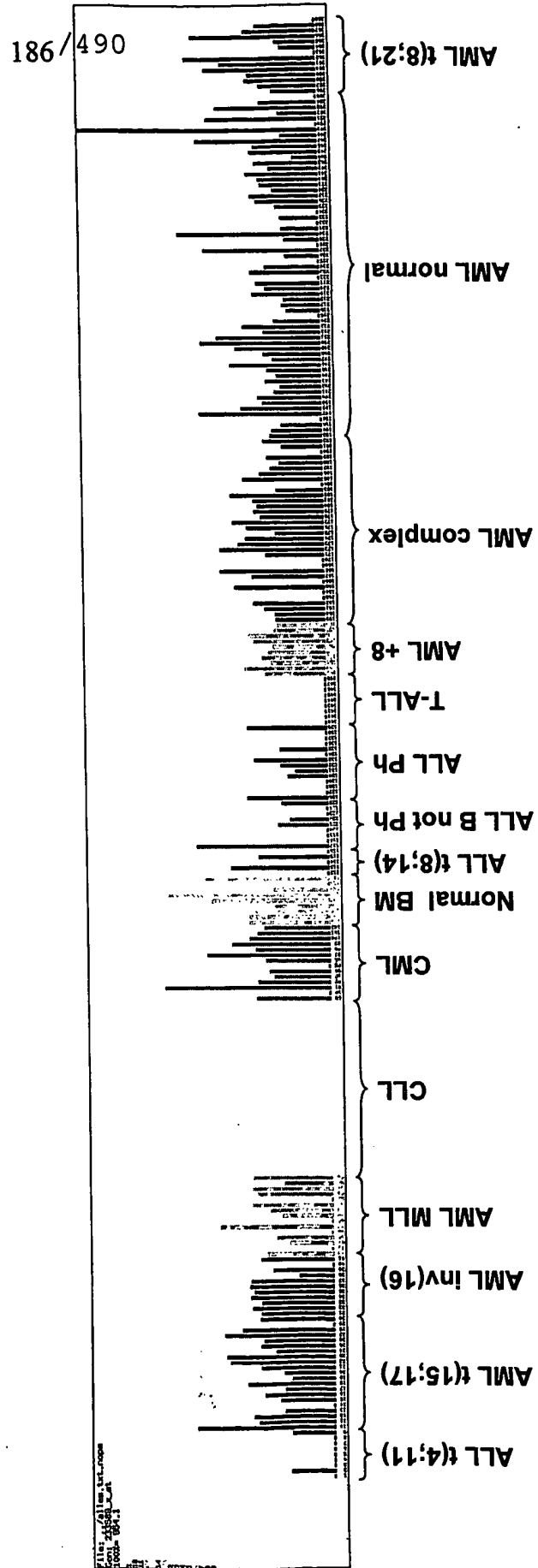


Figure 160

# 207543\_s\_at, P4HA1, T-ALL vs. AML complex

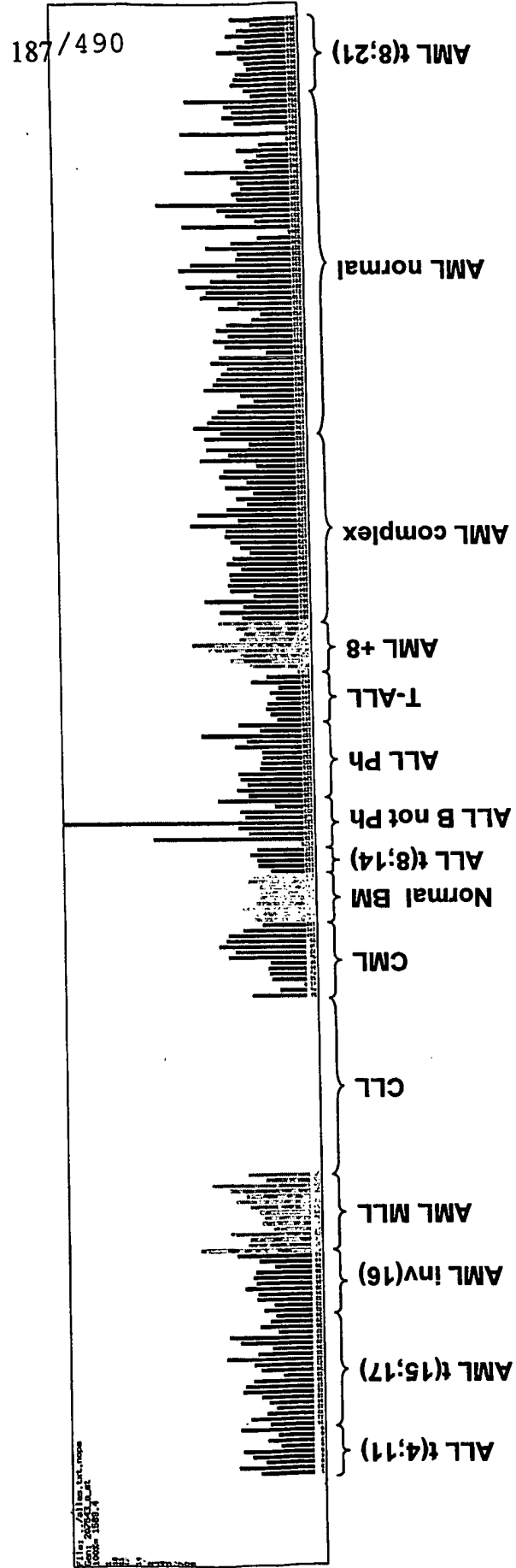


Figure 161

# 230292\_at, T-ALL vs. AML normal

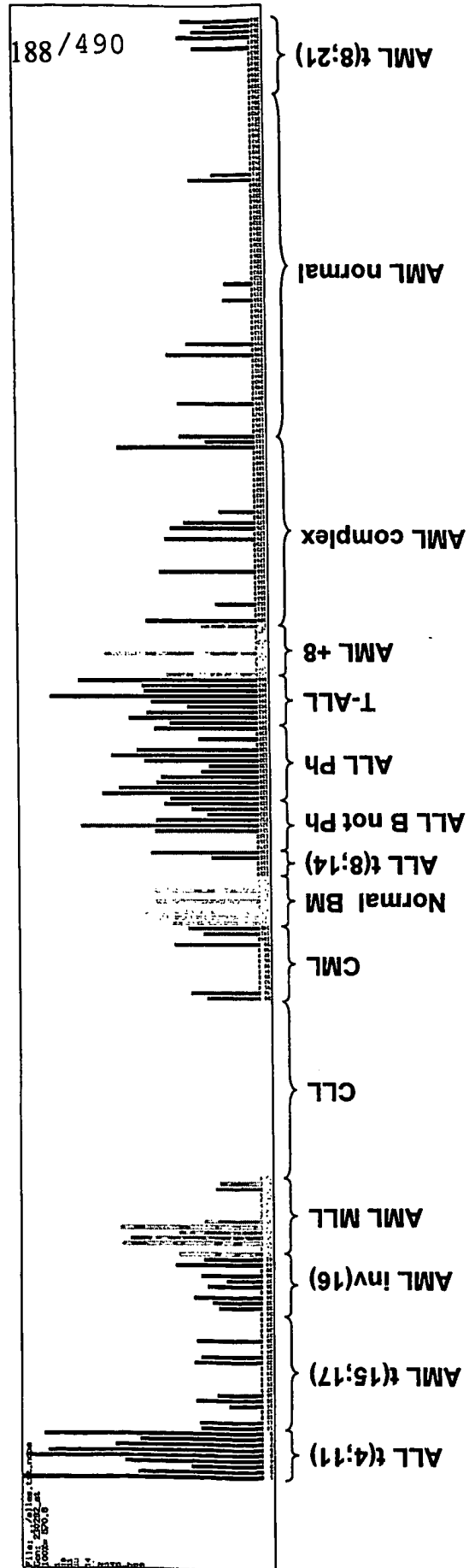
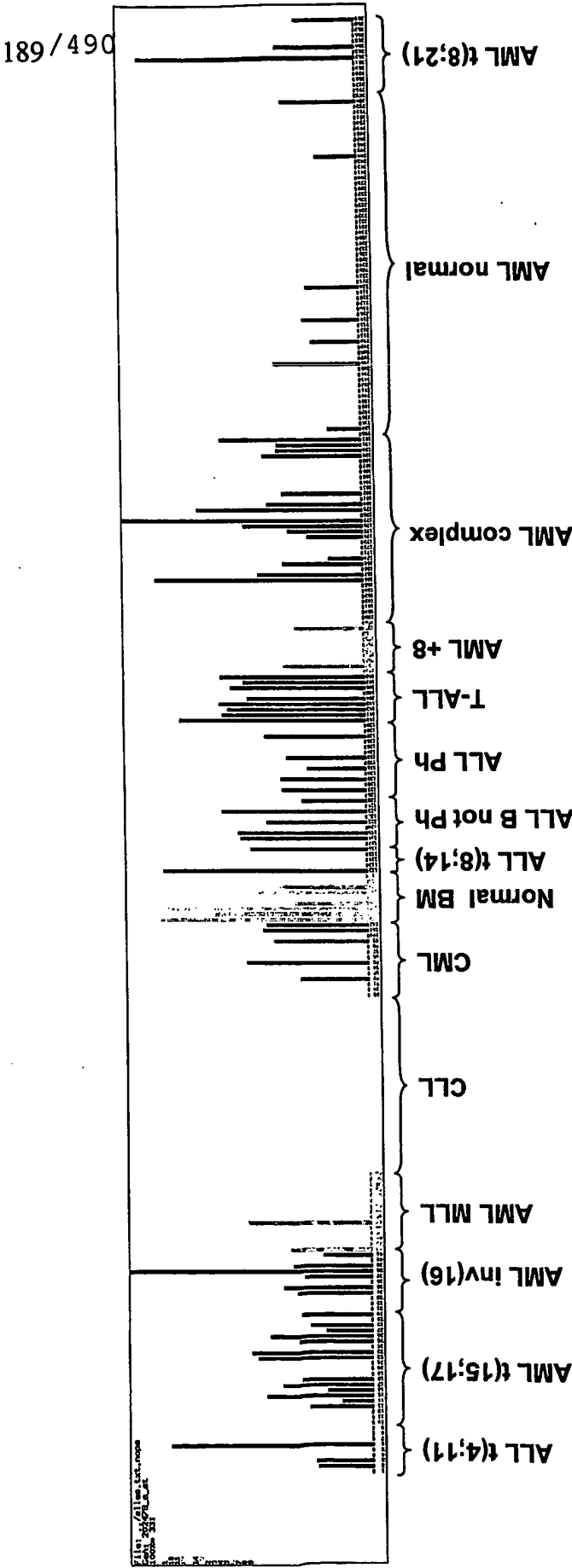


Figure 162



202479\_s\_at, GS3955, T-ALL vs. AML normal

Figure 163



242292\_at, T-ALL vs. AML t(8;21)

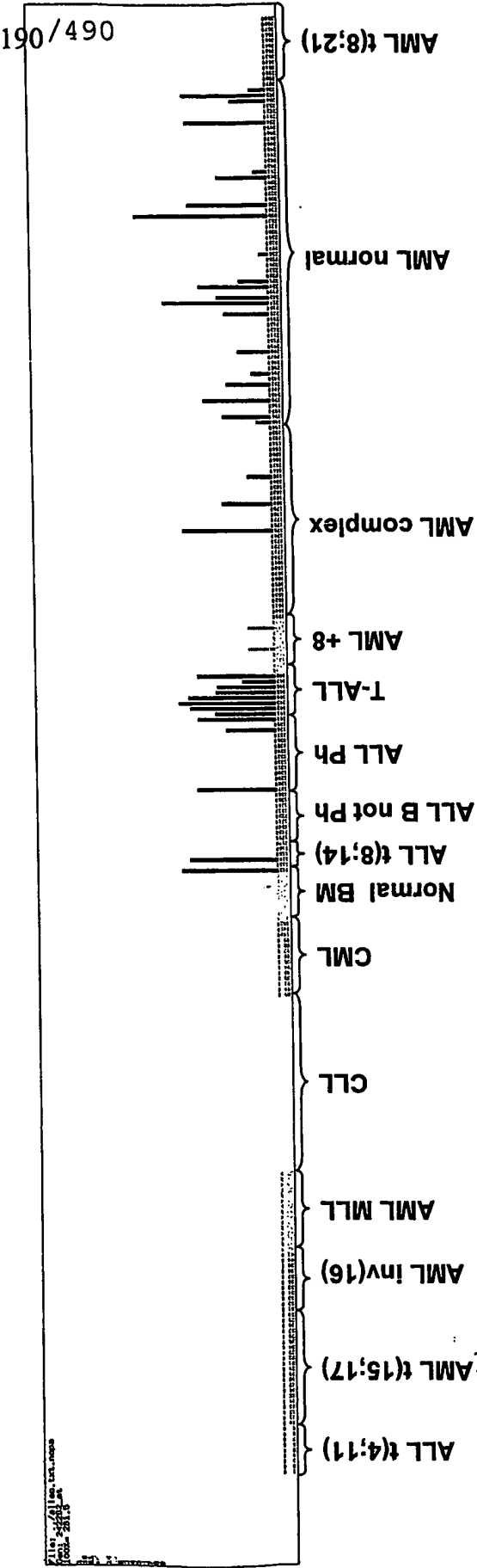
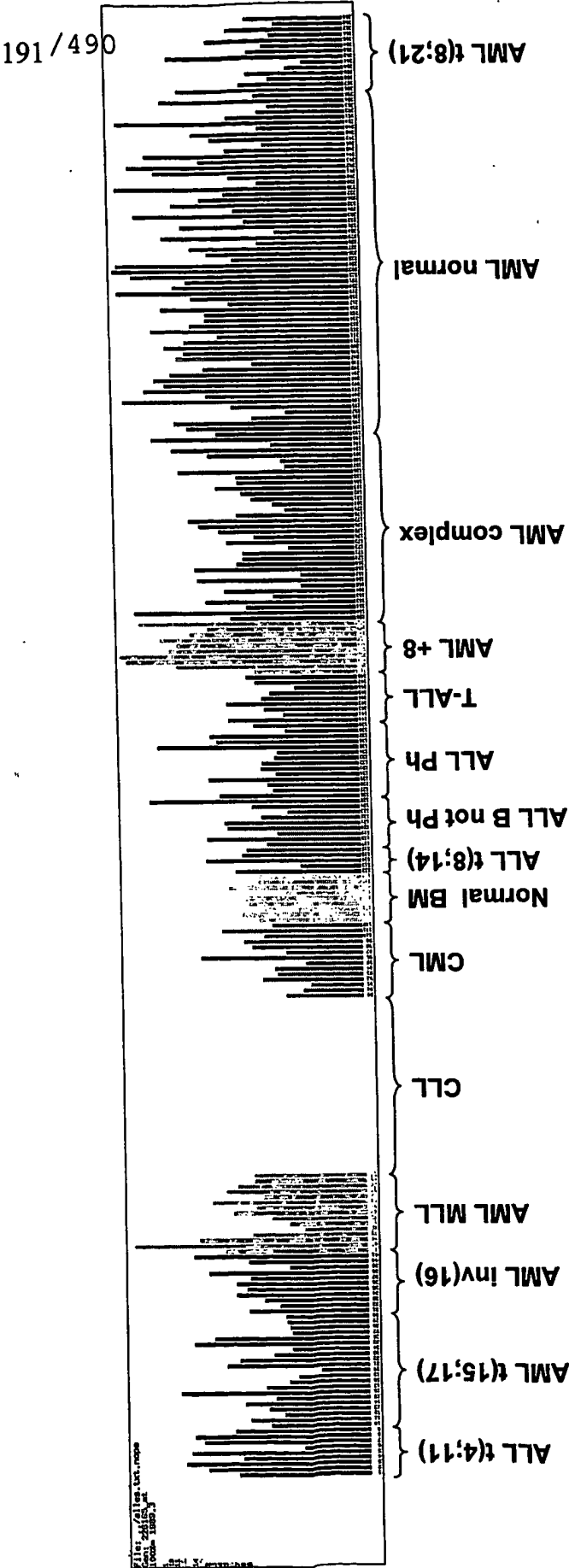


Figure 164

226165\_at, E2F5, AML +8 vs. all others

Figure 165



# 212586\_at, ARTS-1, AML +8 vs. AML complex

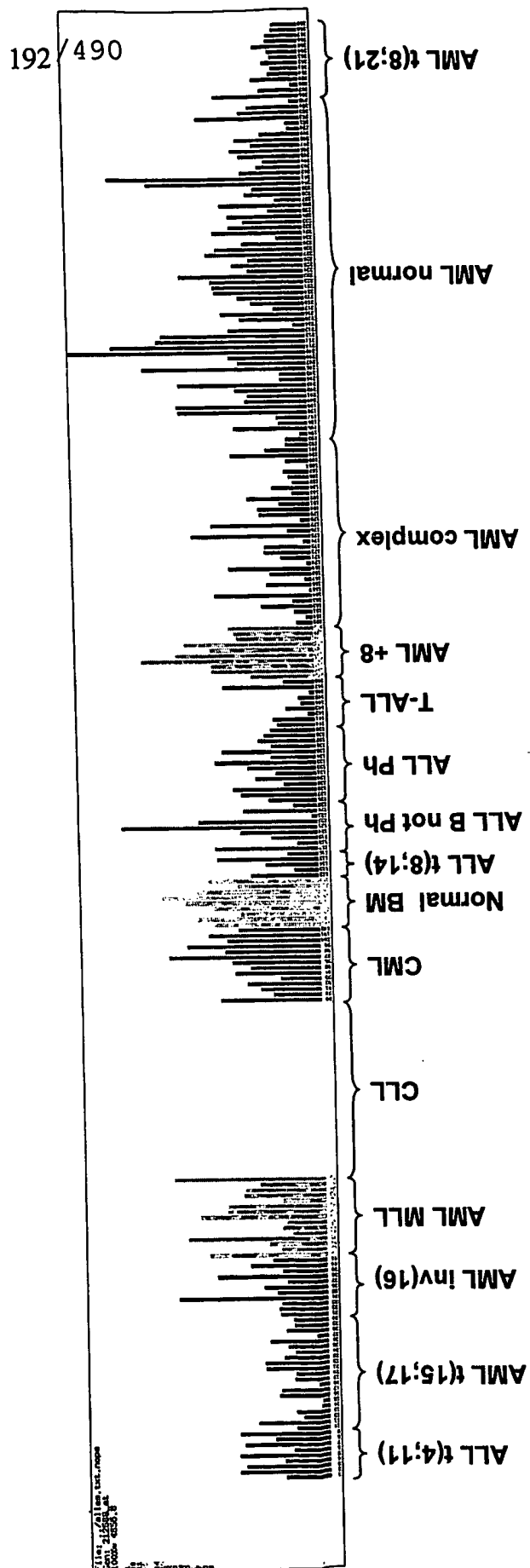


Figure 166

# 226545\_at, AML +8 vs. AML complex

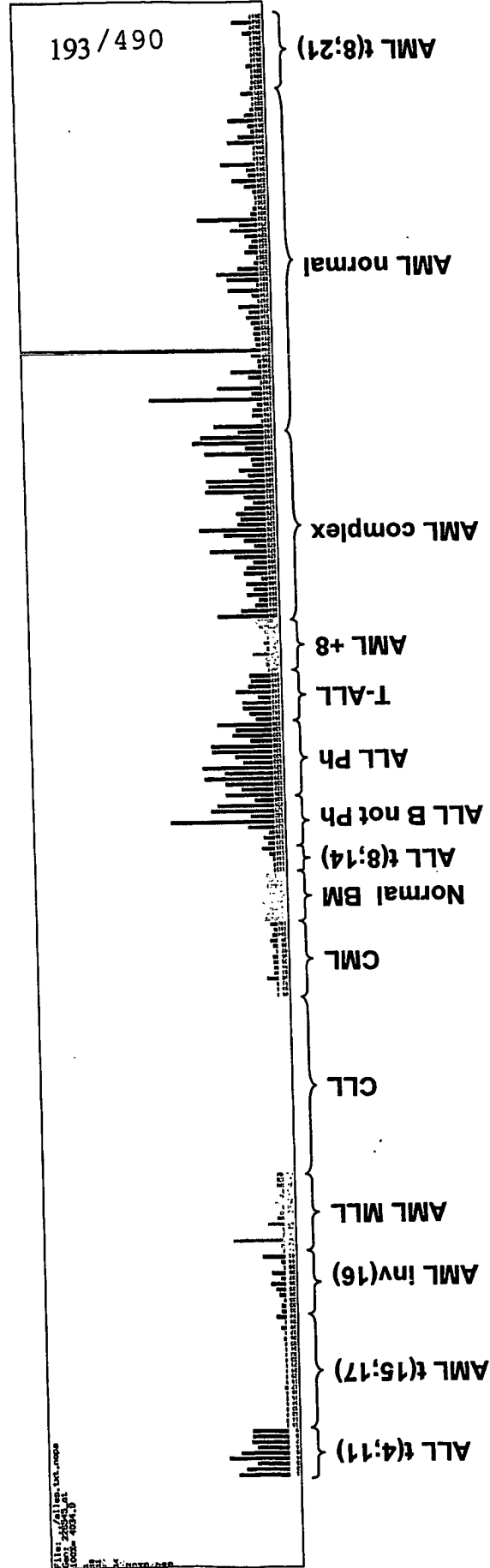
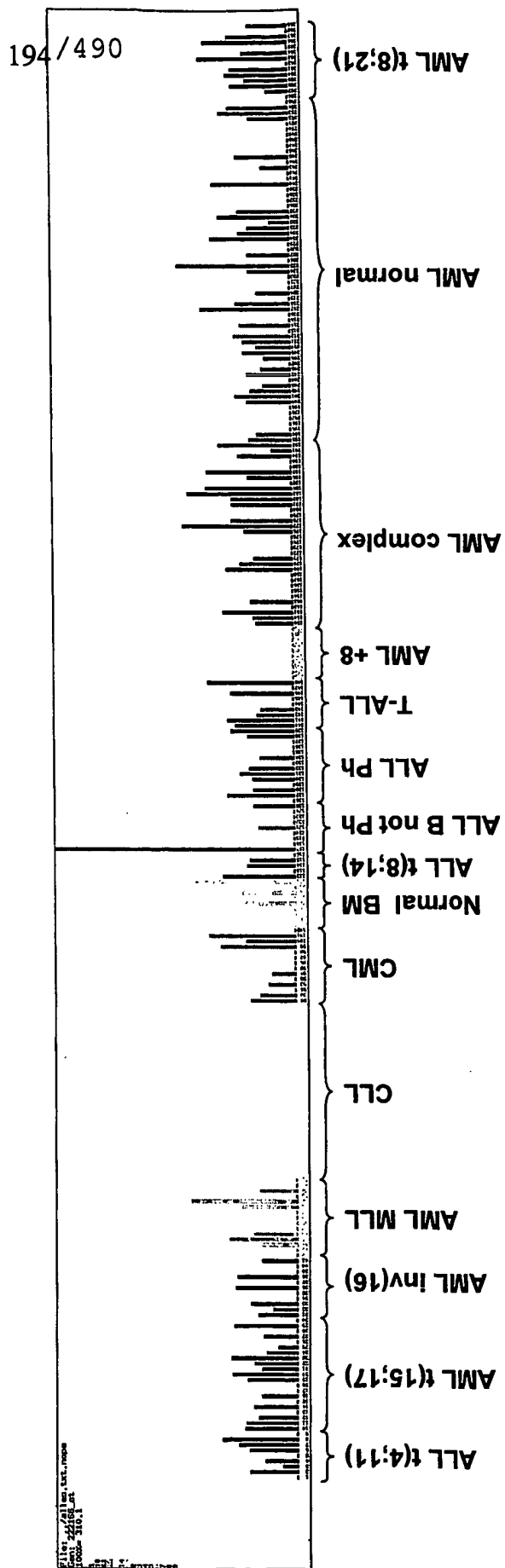


Figure 167

## 222166\_at, AML +8 vs. AML complex



**Figure 168**

# 210715\_s\_at, SPINT2, AML +8 vs. AML complex

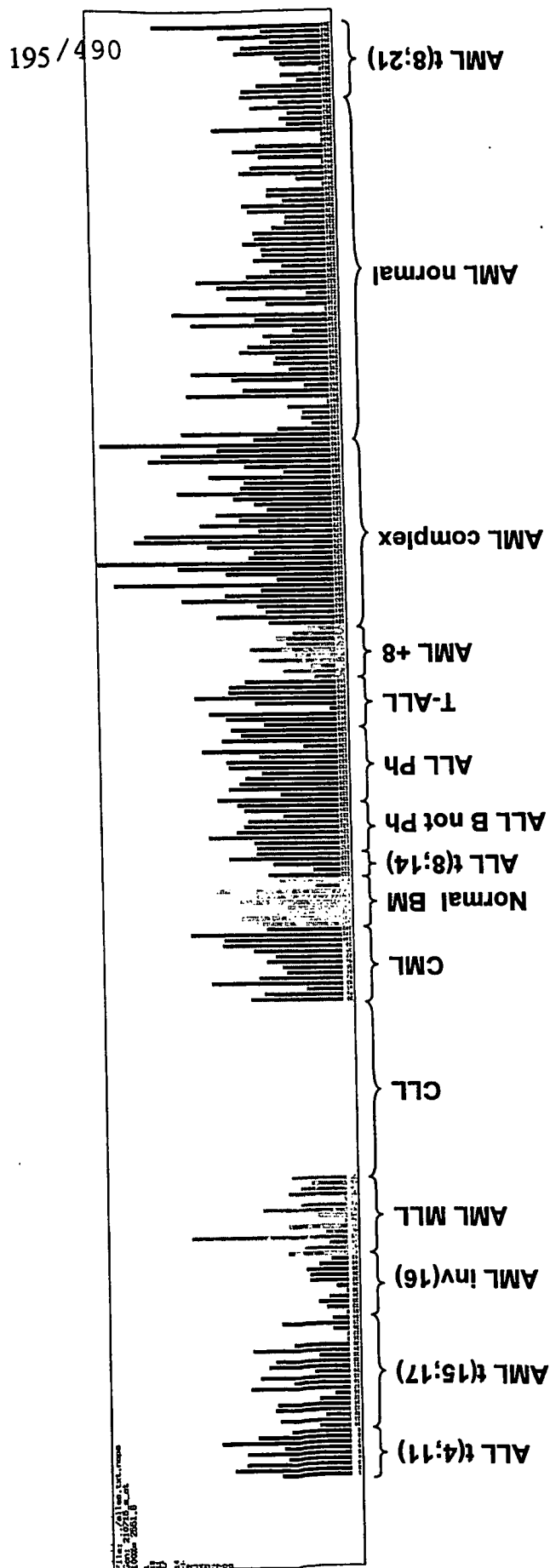


Figure 169

# 217979\_at, NET-6, AML +8 vs. AML complex

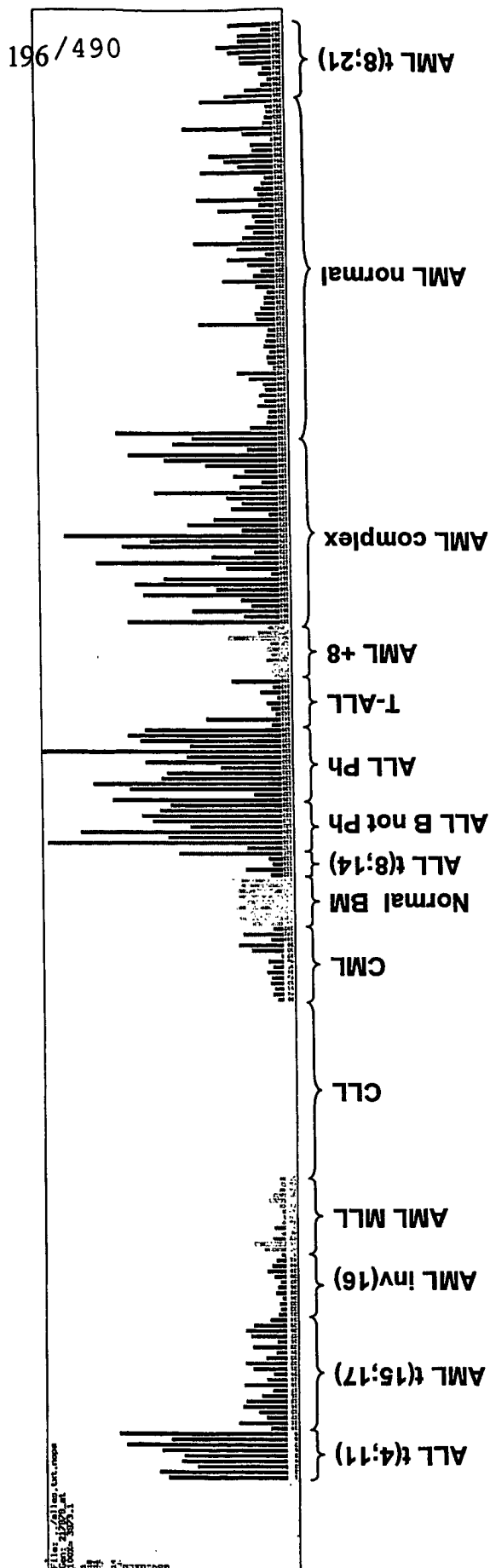


Figure 170



# 201548\_s\_at, PLU-1, AML +8 vs. AML complex

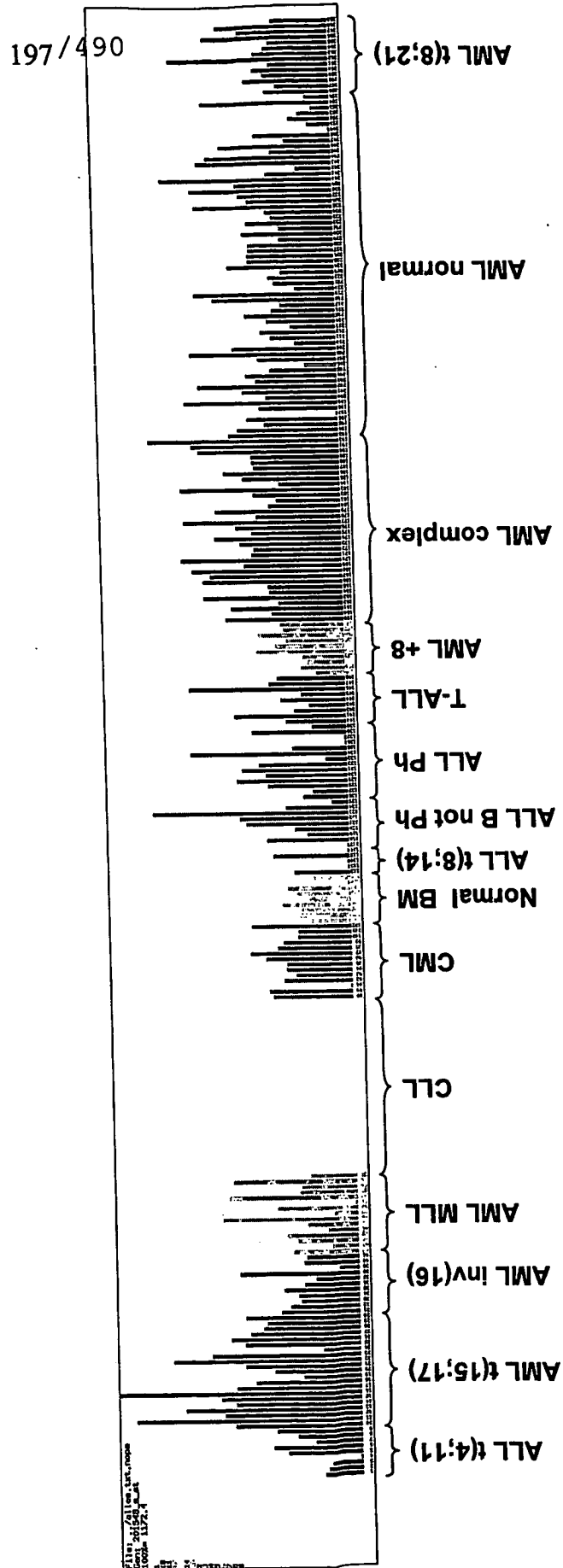


Figure 171

# 212251\_at, AML +8 vs. AML normal

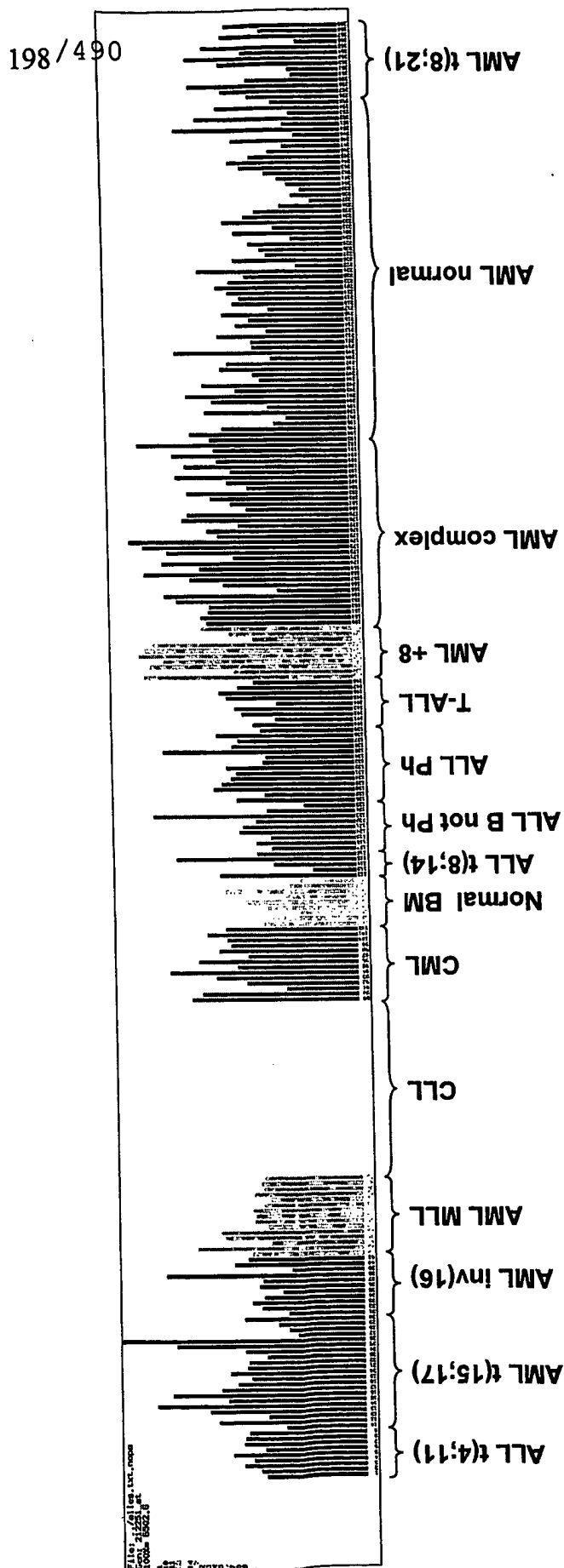
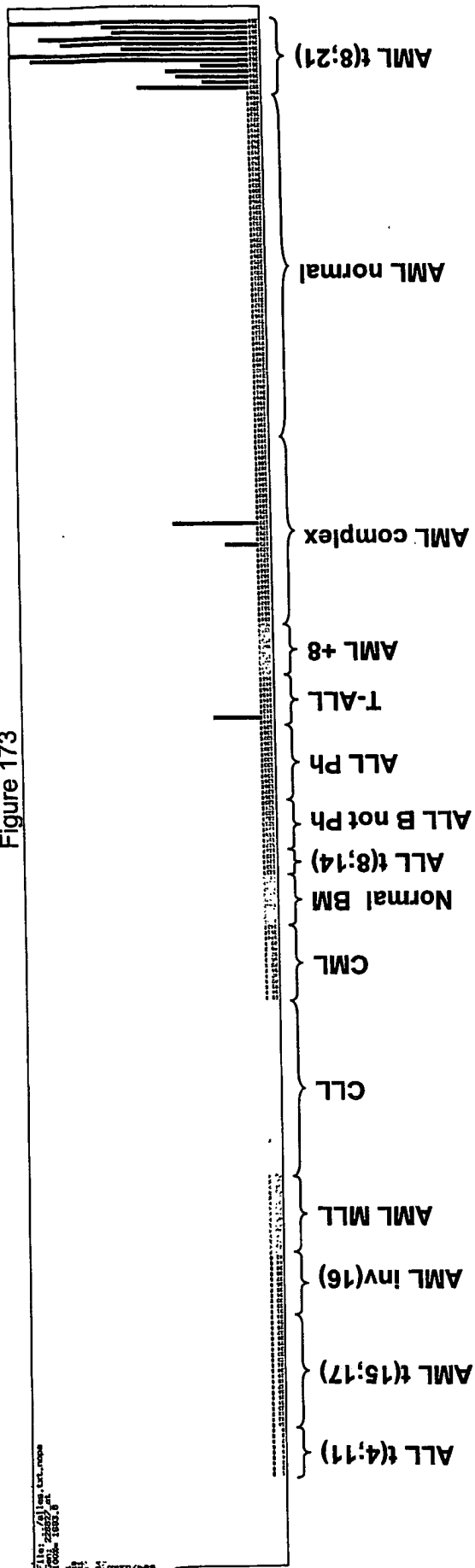


Figure 172

# 228827\_at, AML +8 vs. AML t(8;21)

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Figure 173



200608\_s\_at, RAD21, AML complex vs. all others

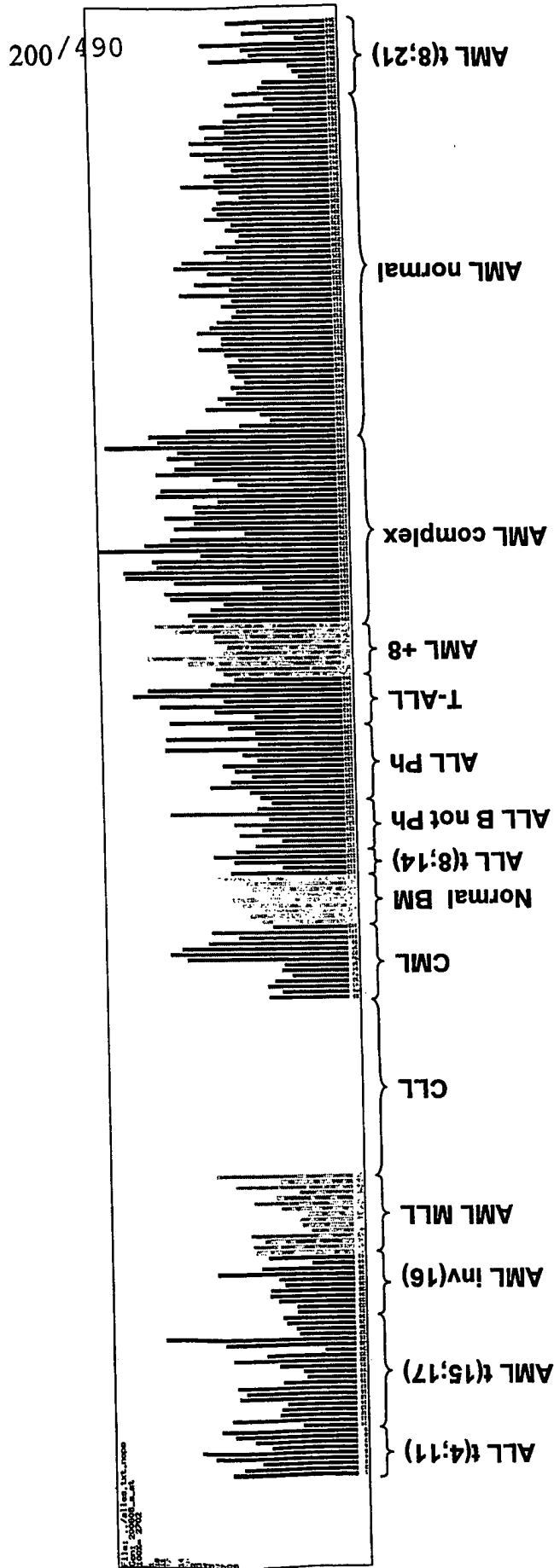


Figure 174

# 219793\_at, SNX16, AML complex vs. all others

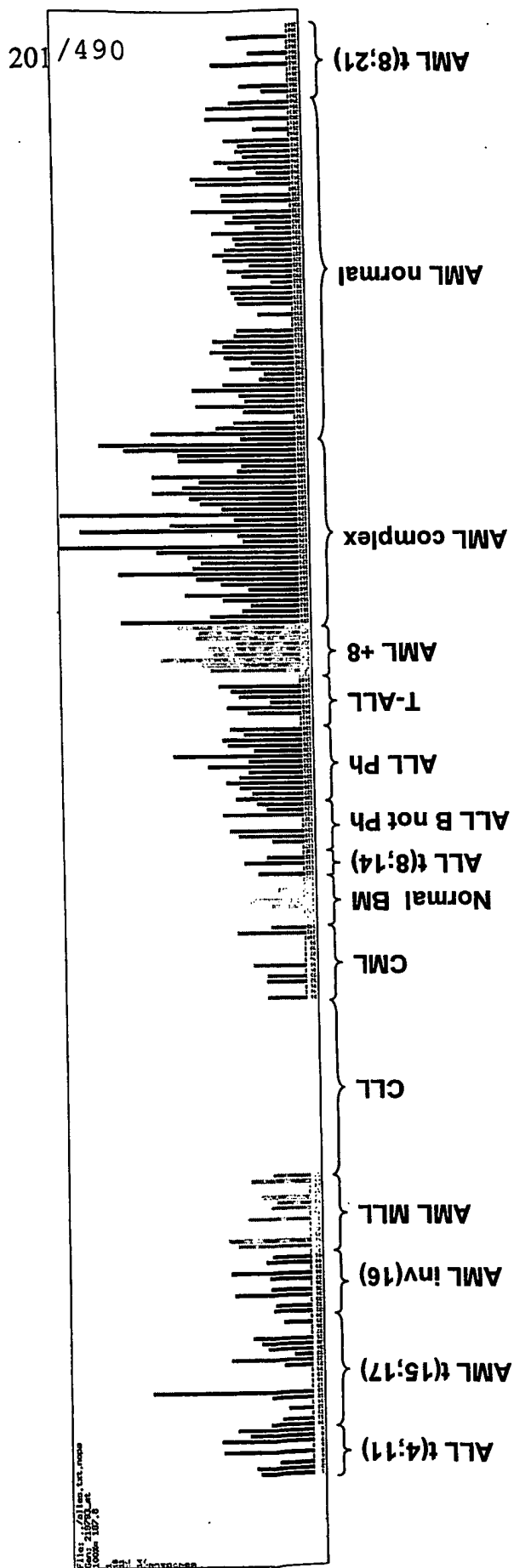


Figure 175

209523\_at, AML complex vs. all others

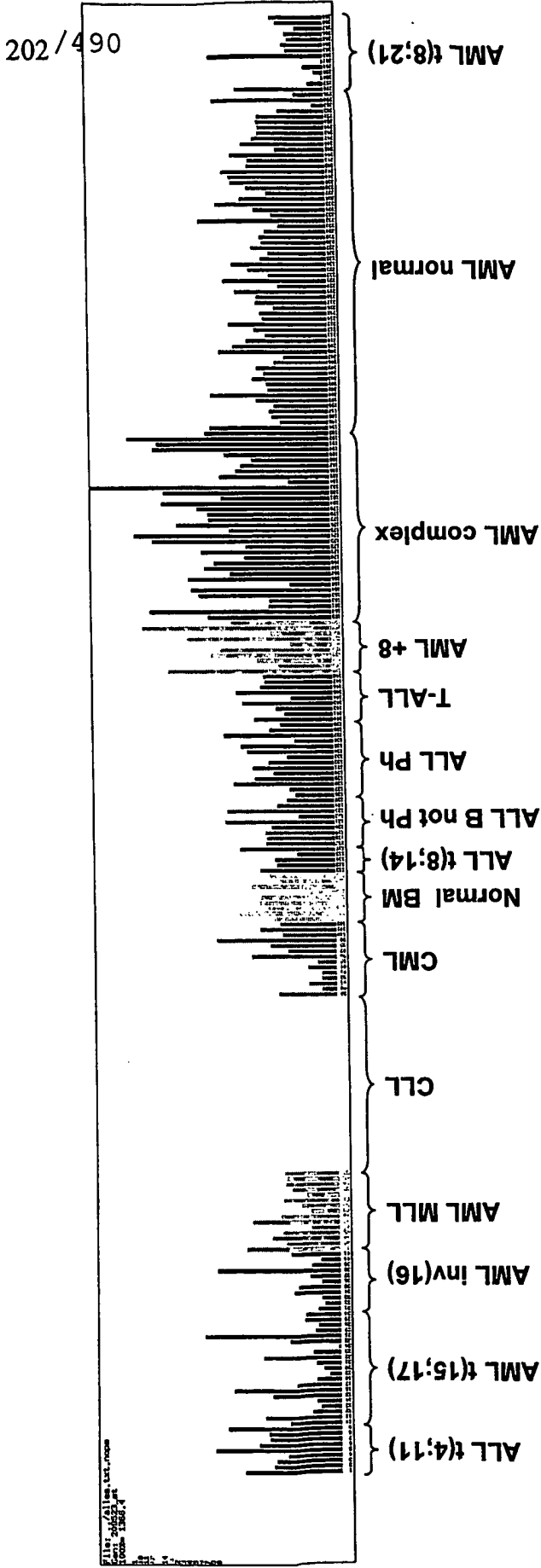


Figure 176

200093\_s\_at - HG-U133B, HINT1, AML complex vs. AML  
normal

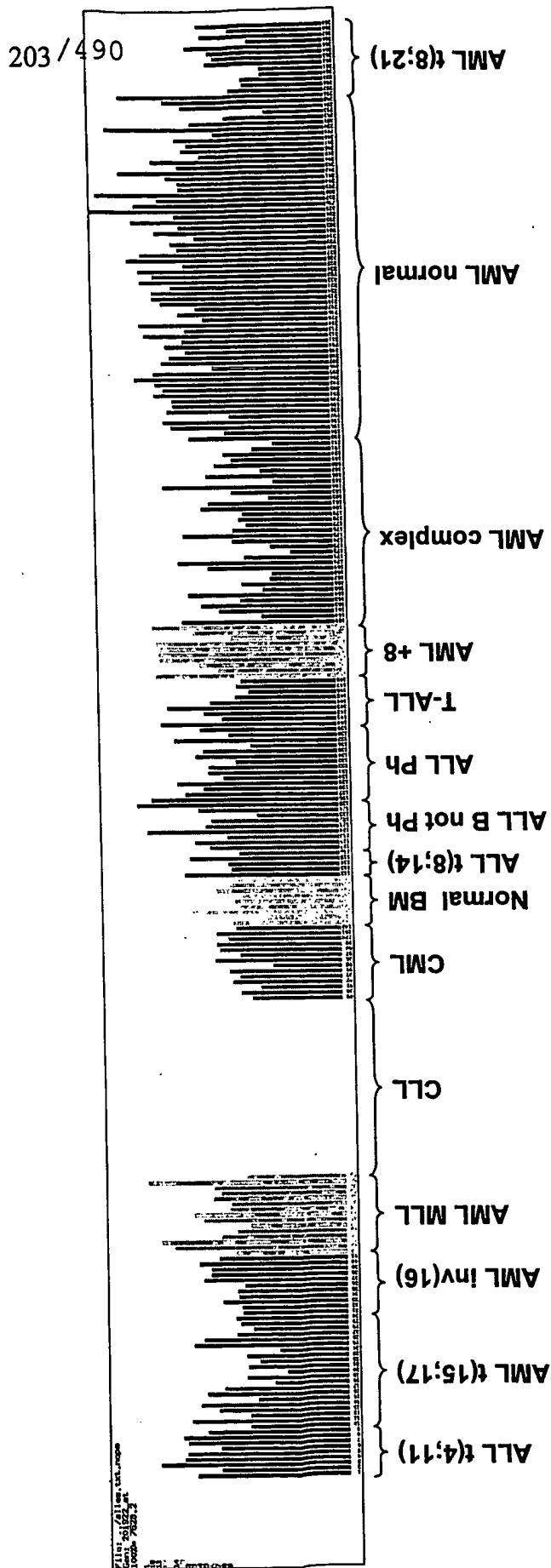


Figure 177

201922\_at, YR-29, AML complex vs. AML normal

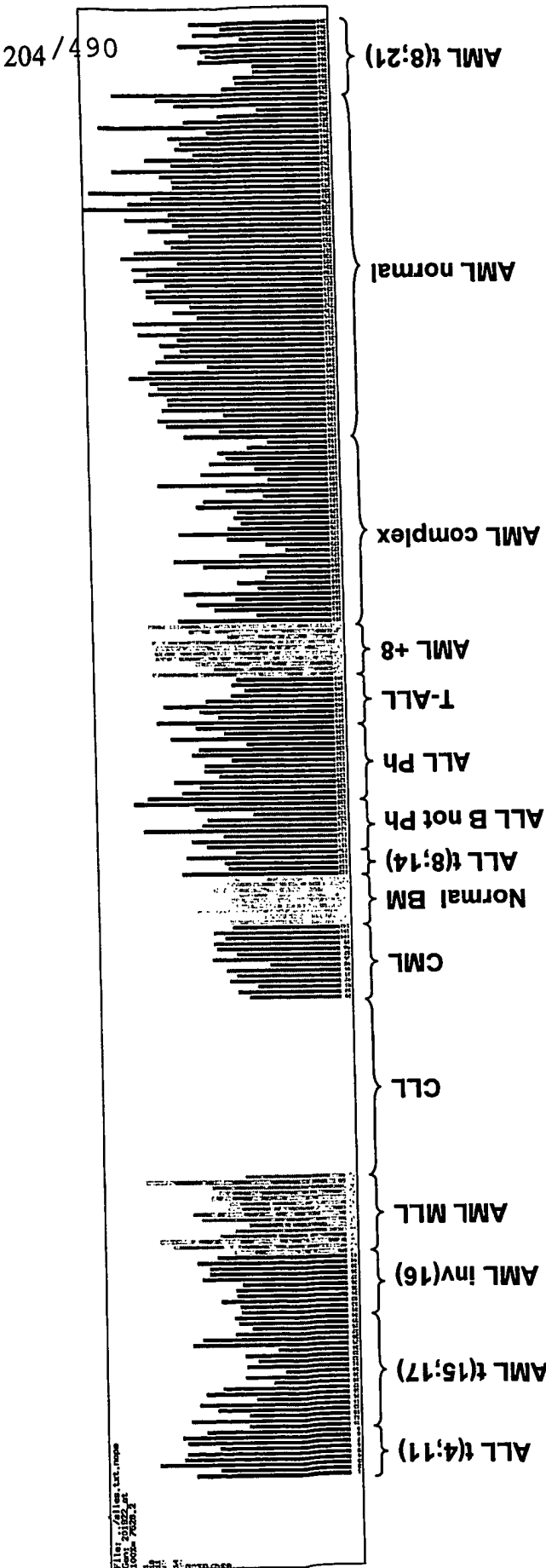


Figure 178



# 239791\_at, HOXB6, AML complex vs. AML normal

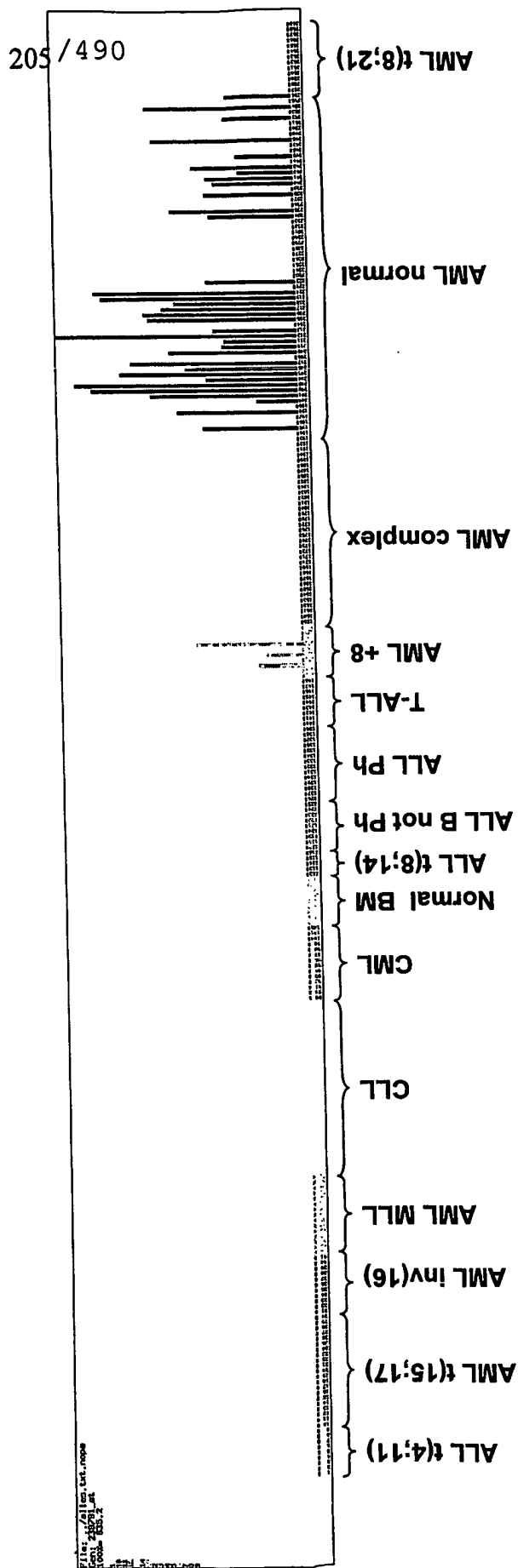


Figure 179

# 200608\_s\_at, RAD21, AML complex vs. AML normal

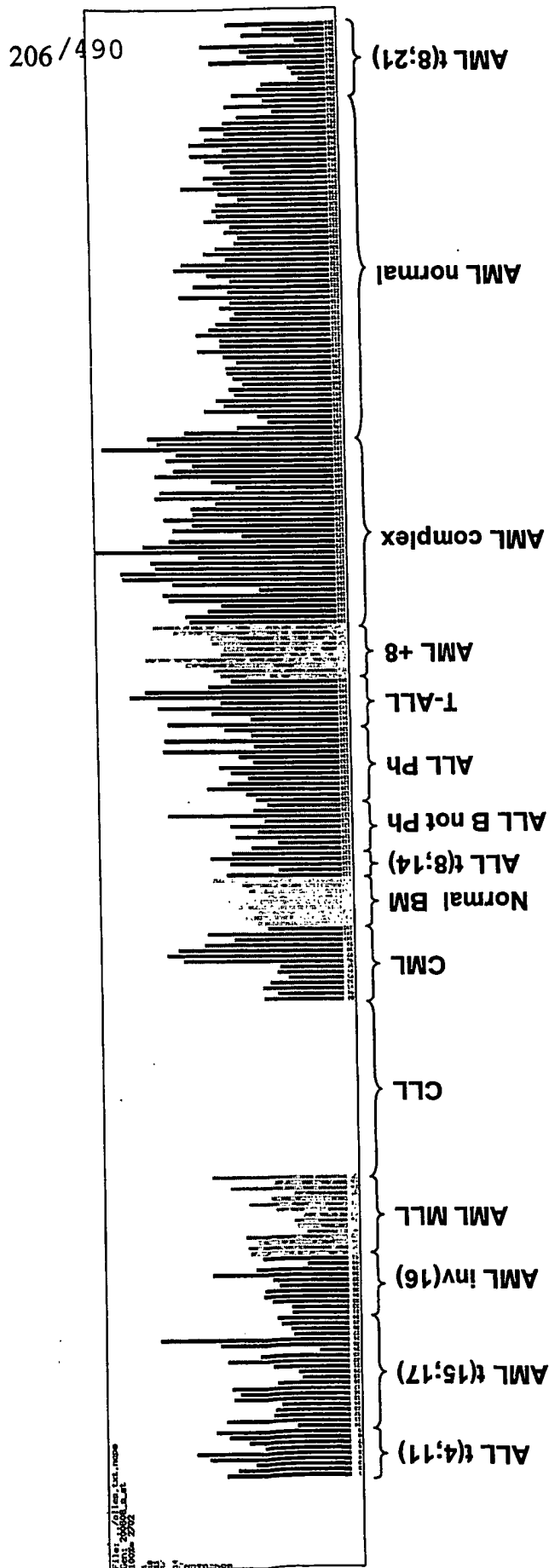


Figure 180

# 211950\_at, RBAF600, AML complex vs. AML normal

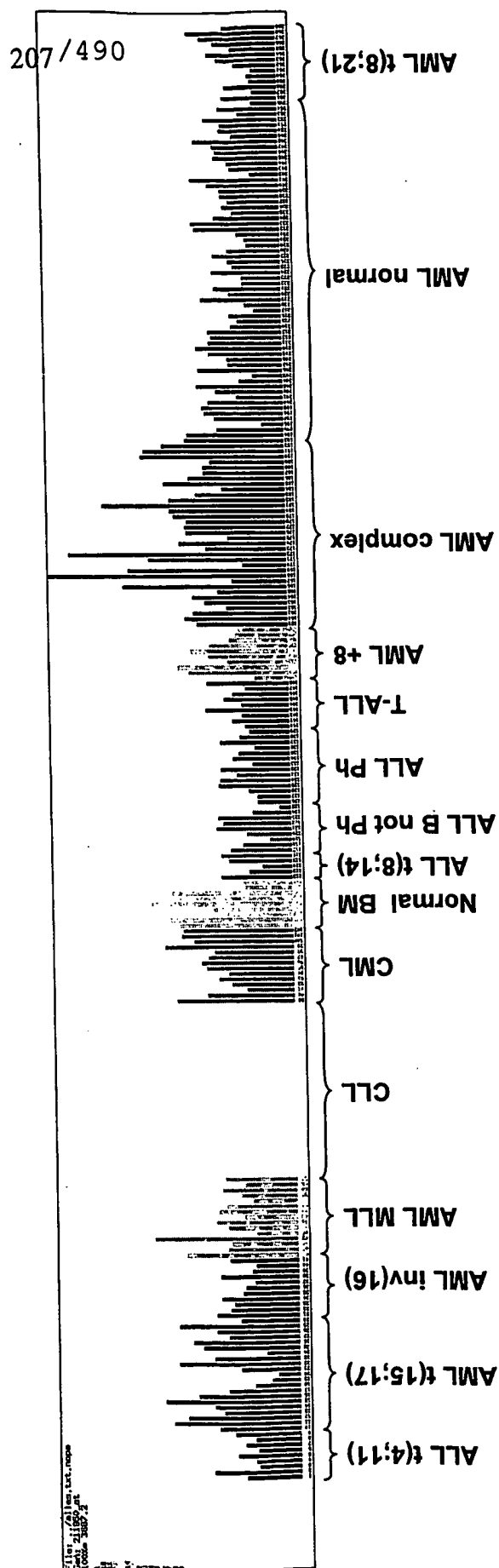
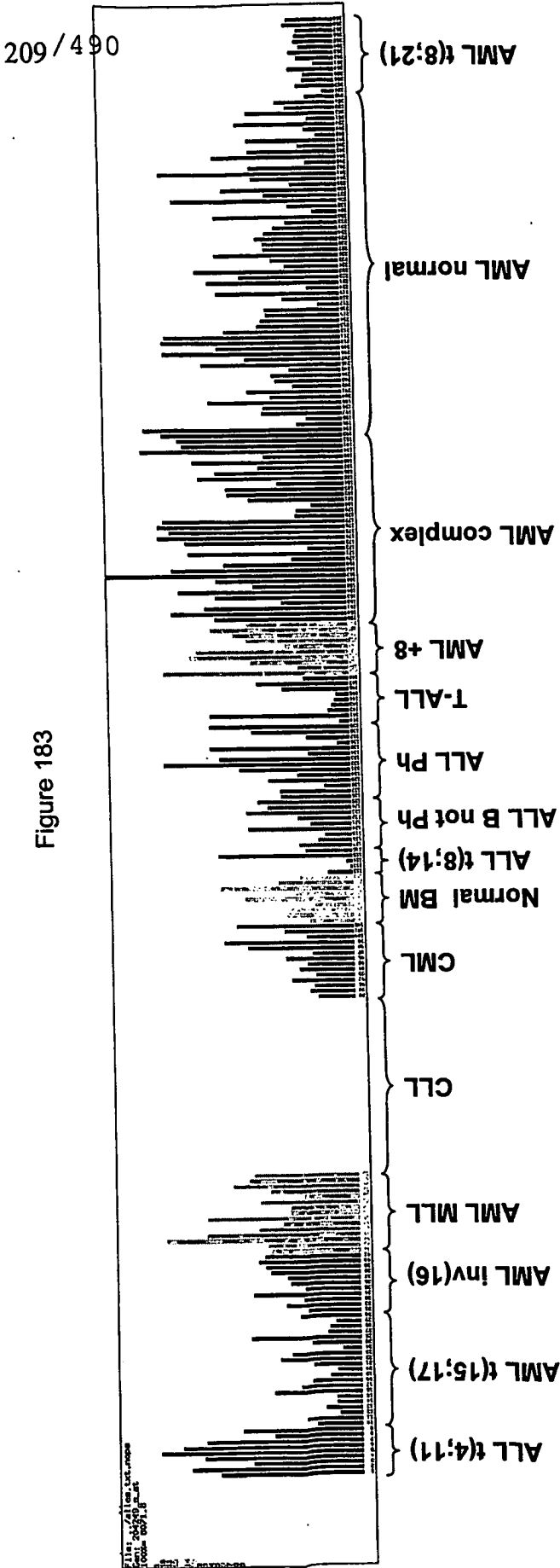


Figure 181

228827\_at, AML complex vs. AML t(8;21)

204249\_s\_at, LMO2, AML complex vs. AML t(8;21)



# 236892\_s\_at, HOXB6, AML normal vs. all others

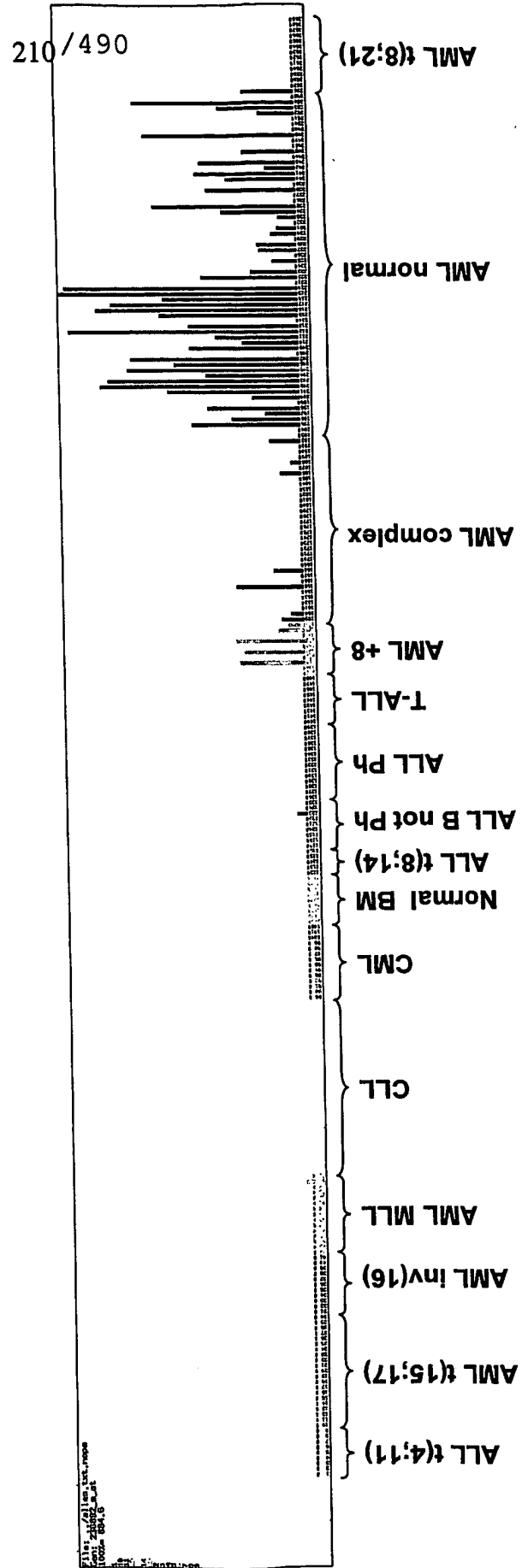


Figure 184

205366\_s\_at, HOXB6, AML normal vs. All others

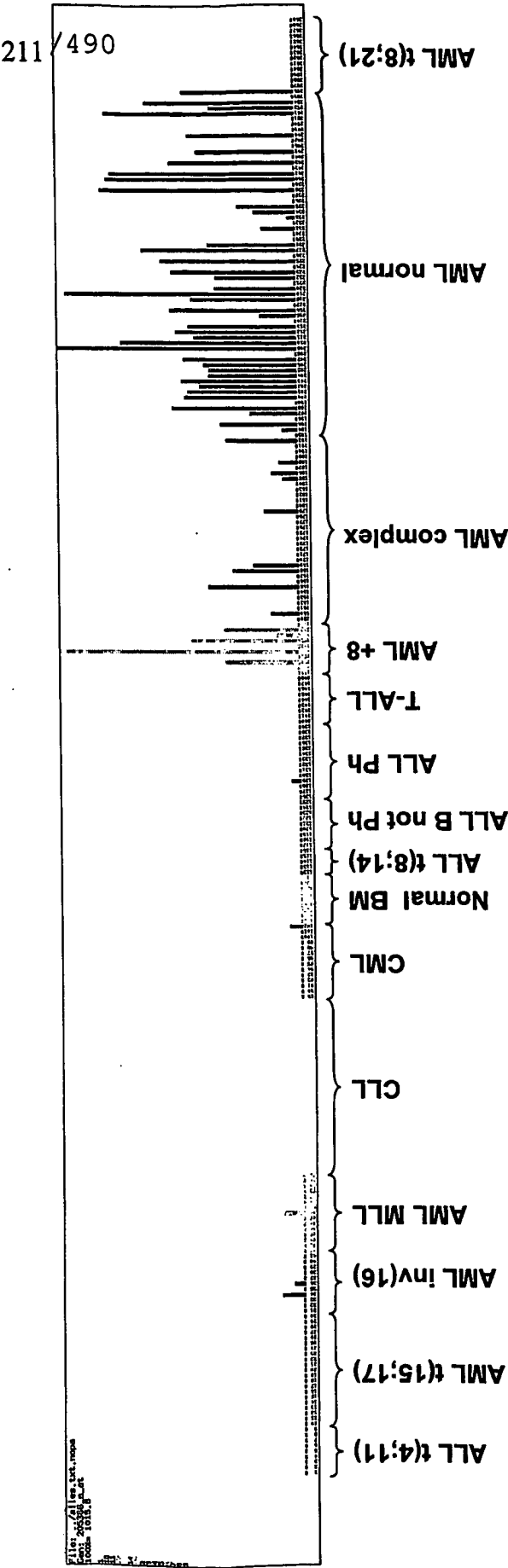
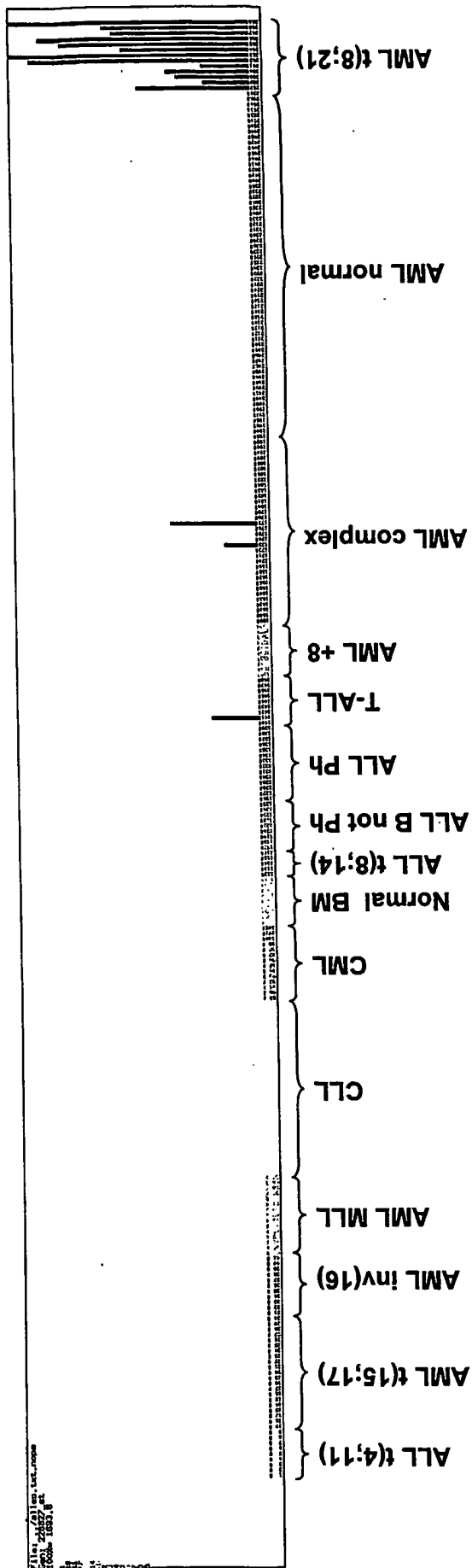


Figure 185

# 228827\_at, AML normal vs. AML t(8;21)

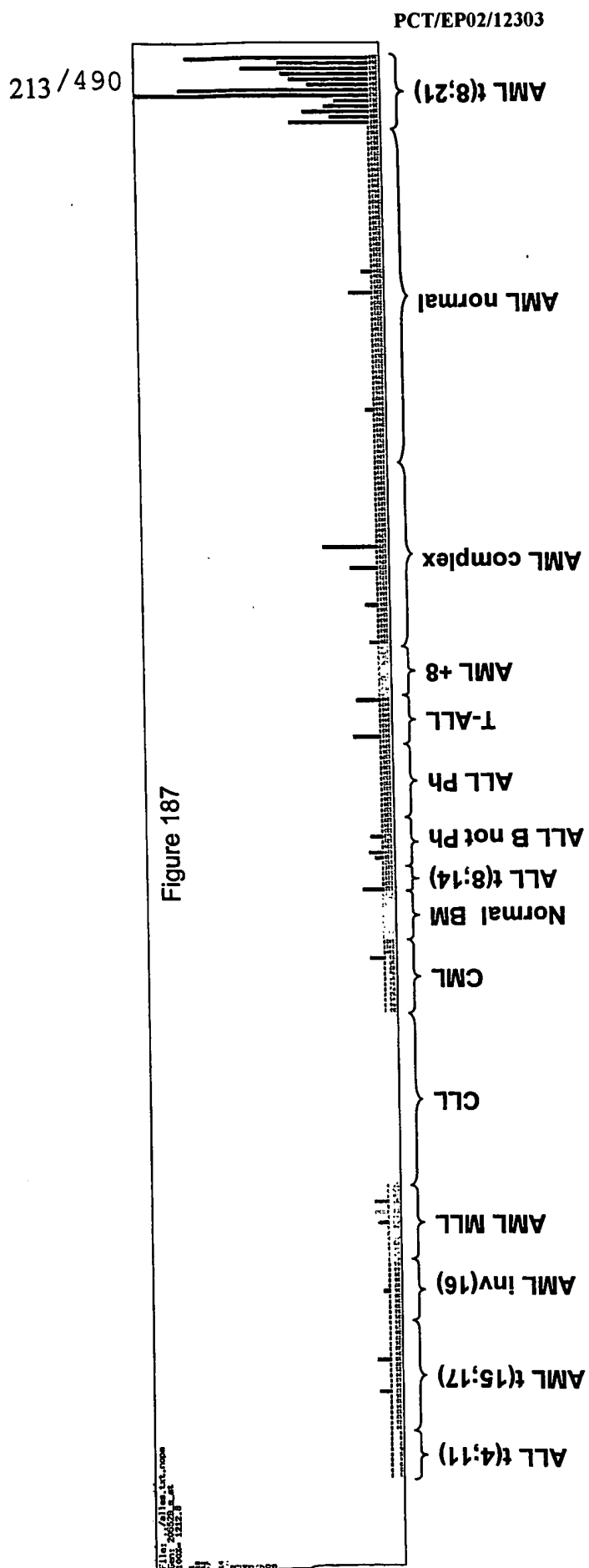
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Figure 186





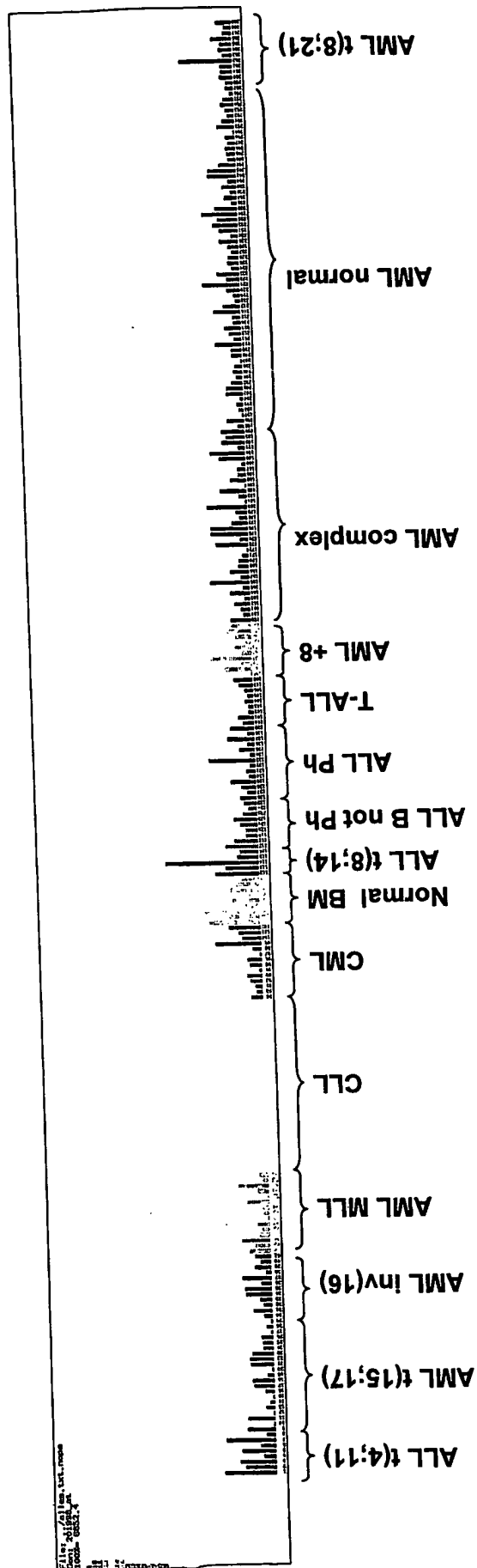
# 205529\_s\_at, CBFA2T1, AML t(8;21) vs. all others



# 201998\_at, SIAT1, CLL

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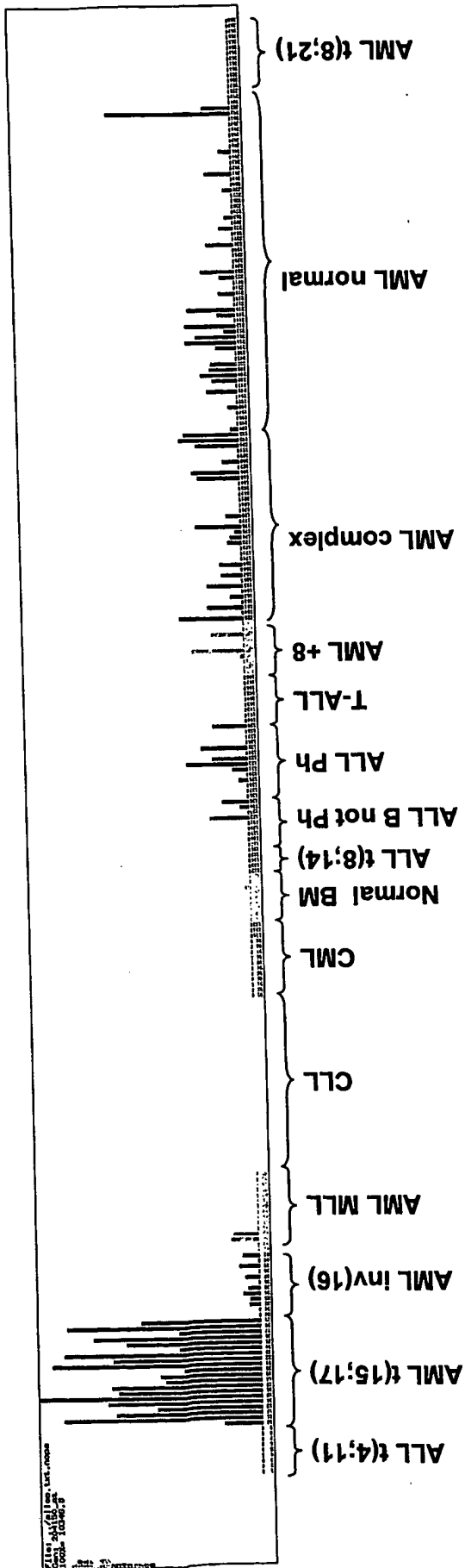
Figure 188



# 204150\_at, STAB1, AML t(15;17)

Figure 189

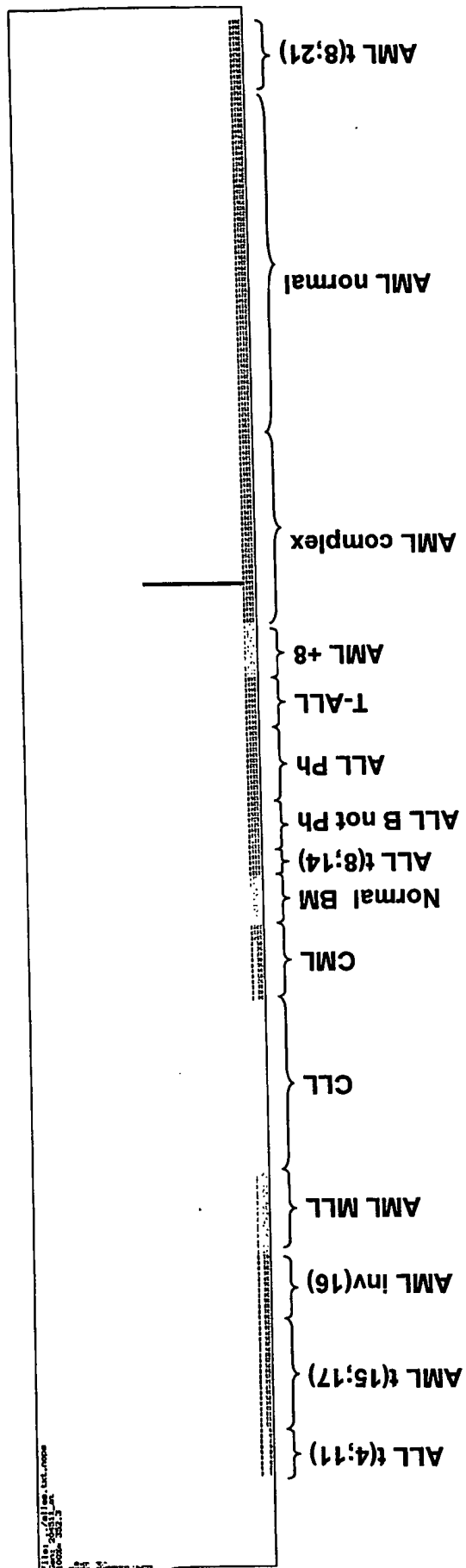
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# 204511\_at, KIAA0793, CLL

Figure 190

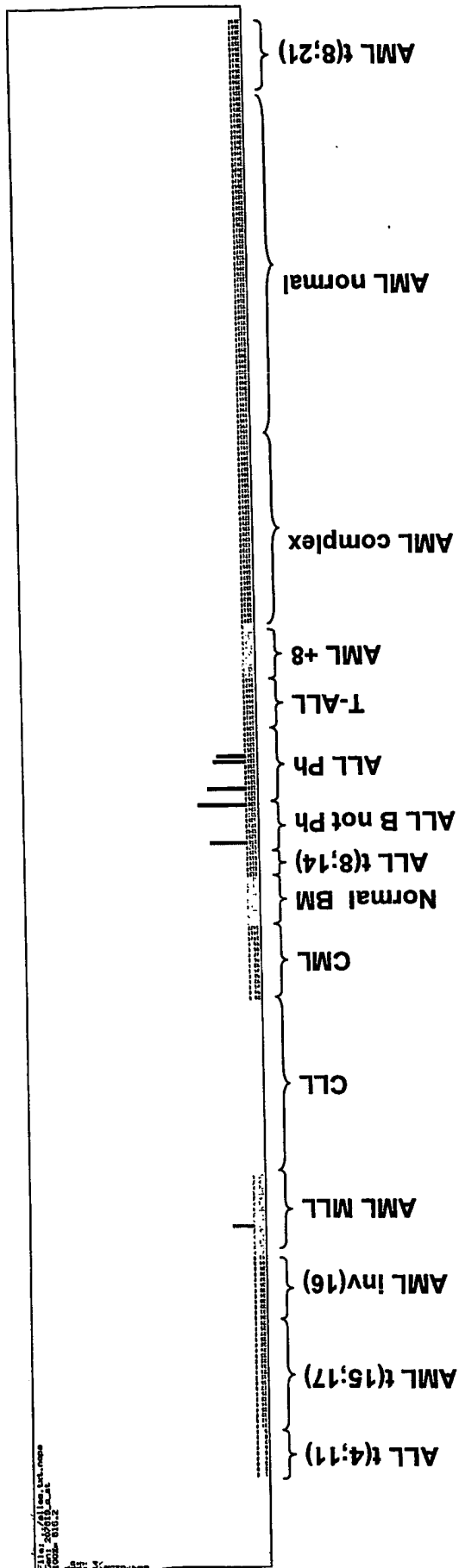
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# 207819\_s\_at, ABCB4, CLL

Figure 191

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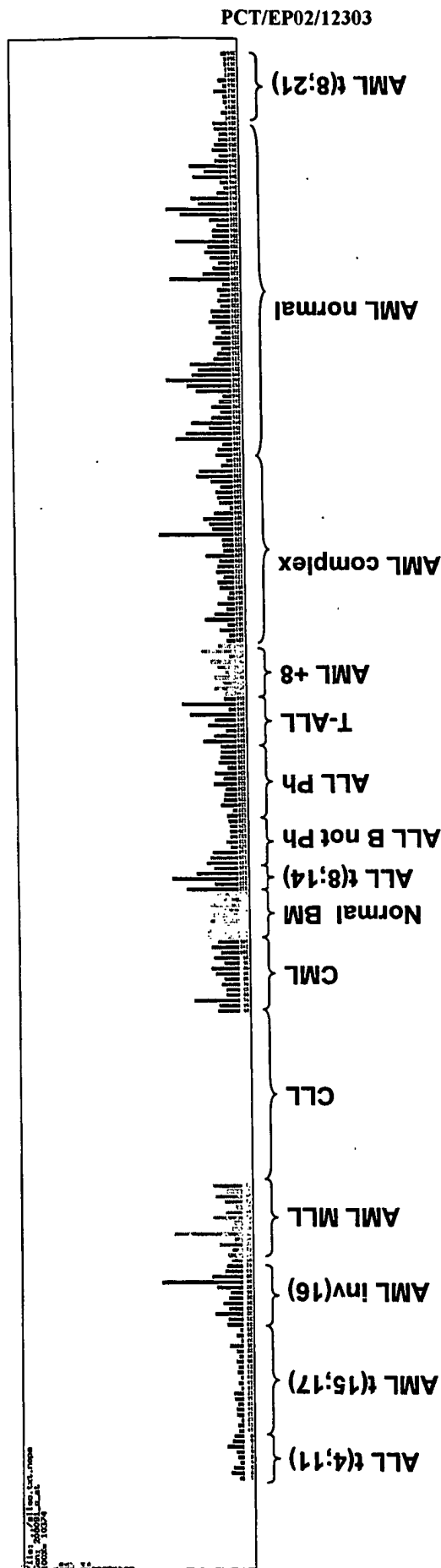




# 208091\_s\_at, DKFZP564K0822, CLL

Figure 193

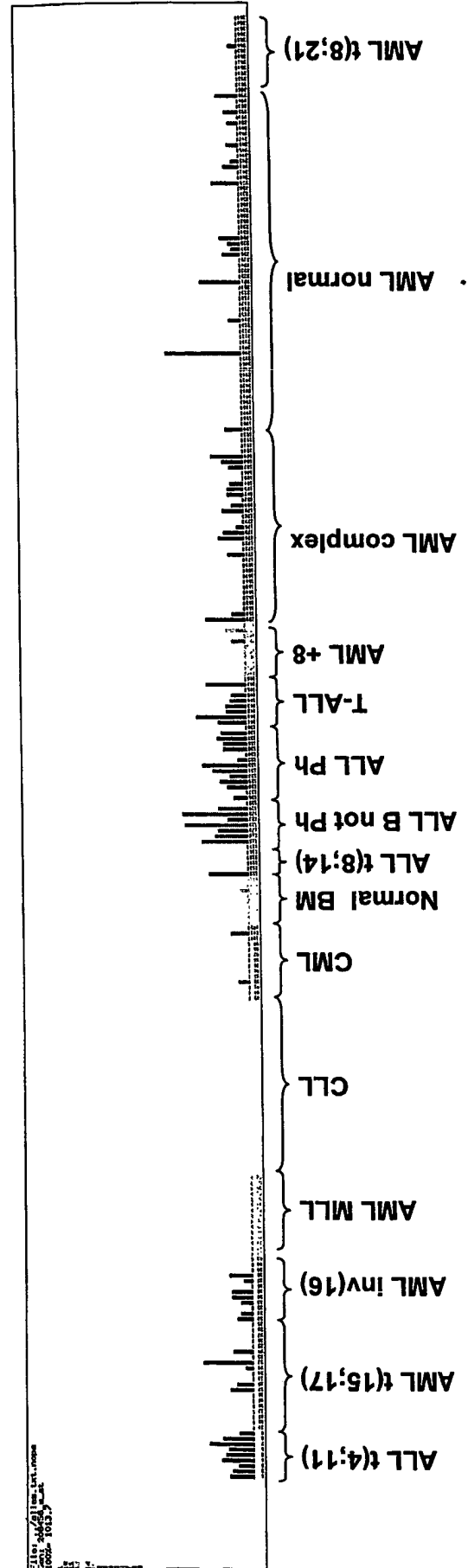
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# 208456\_s\_at, RRAS2, CLL

Figure 194

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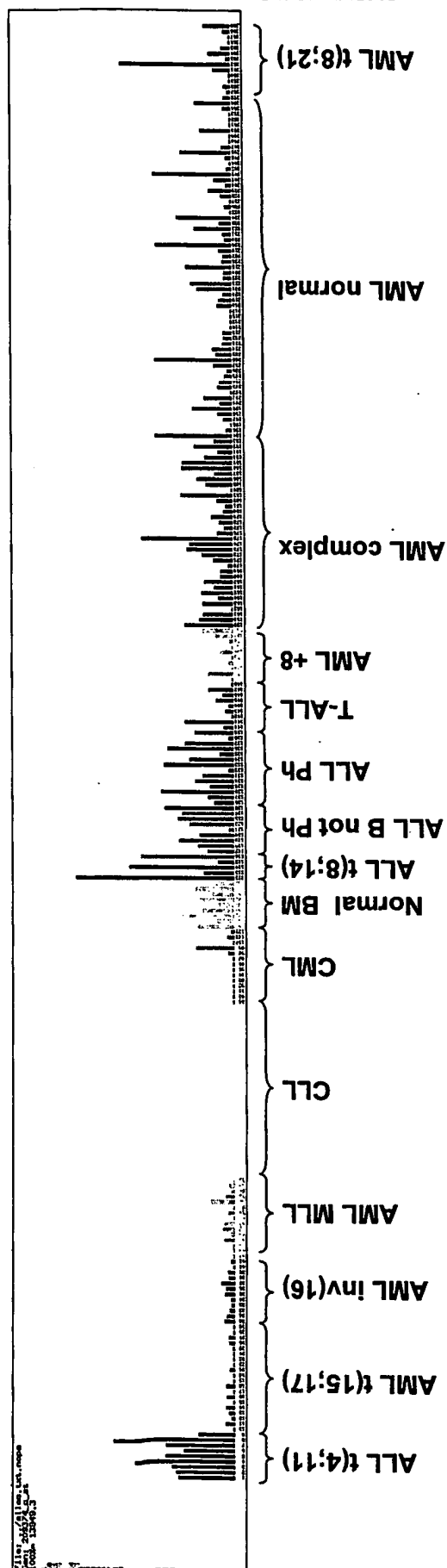




# 209374\_s\_at, IGHM, CLL

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Figure 196

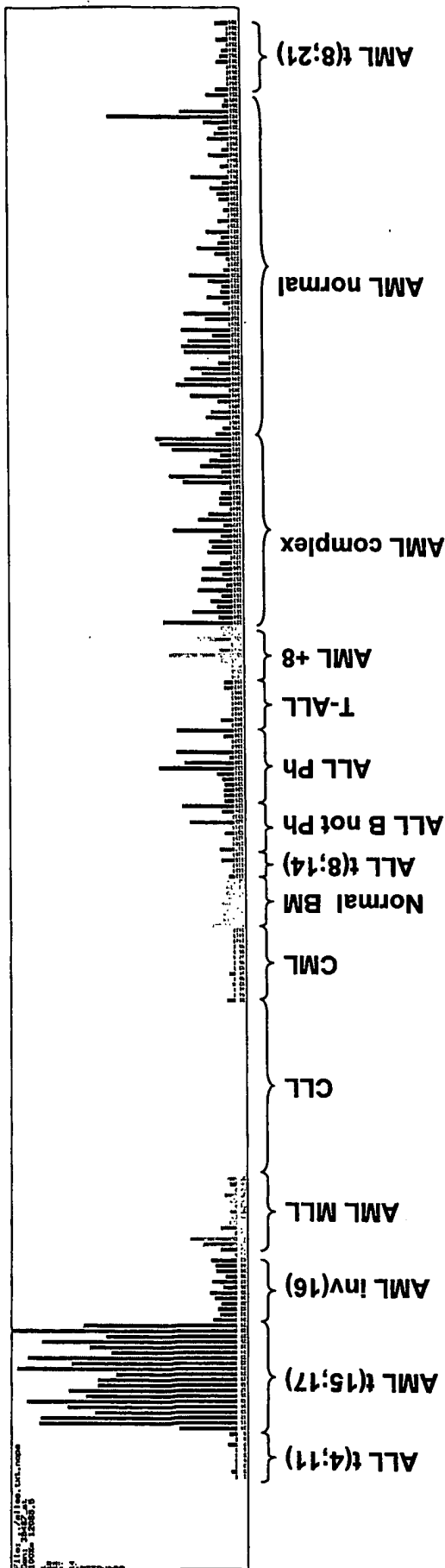


# 38487\_at, FLJ12442, AML t(15;17)

Figure 197

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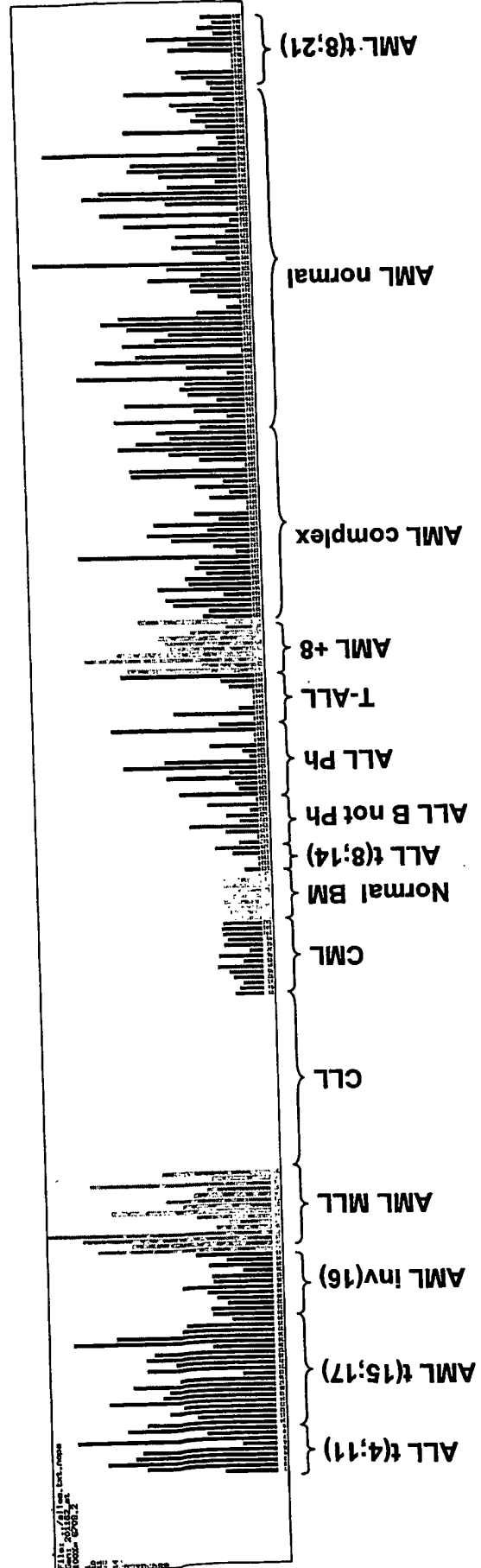
PCT/EP02/12303



# 201162\_at, IGFBP7, CLL

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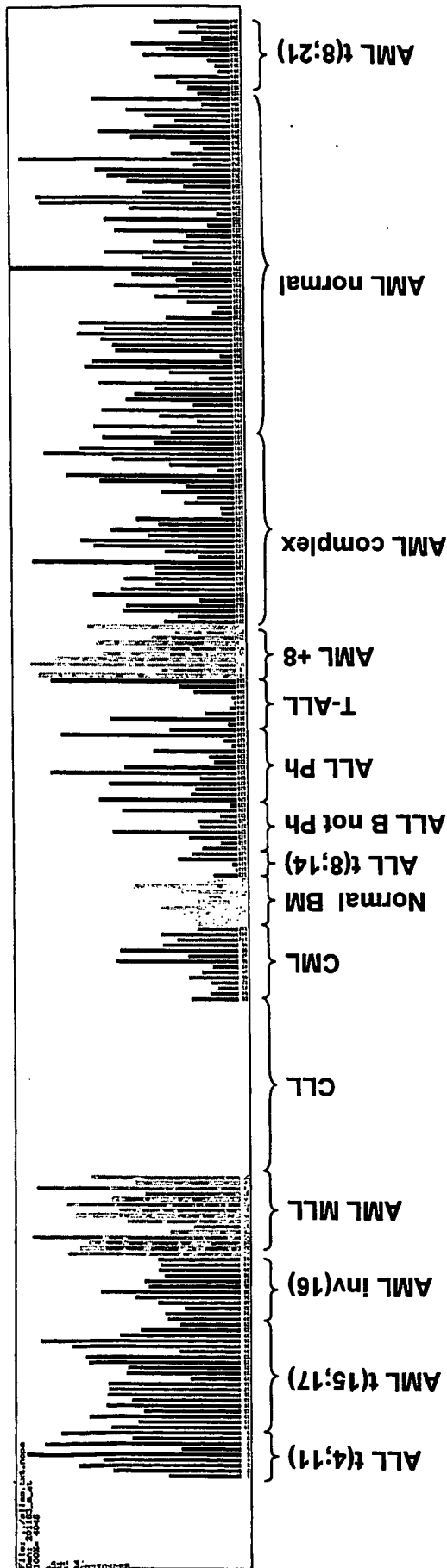
Figure 198



# 201163\_s\_at, IGFBP7, CLL

Figure 199

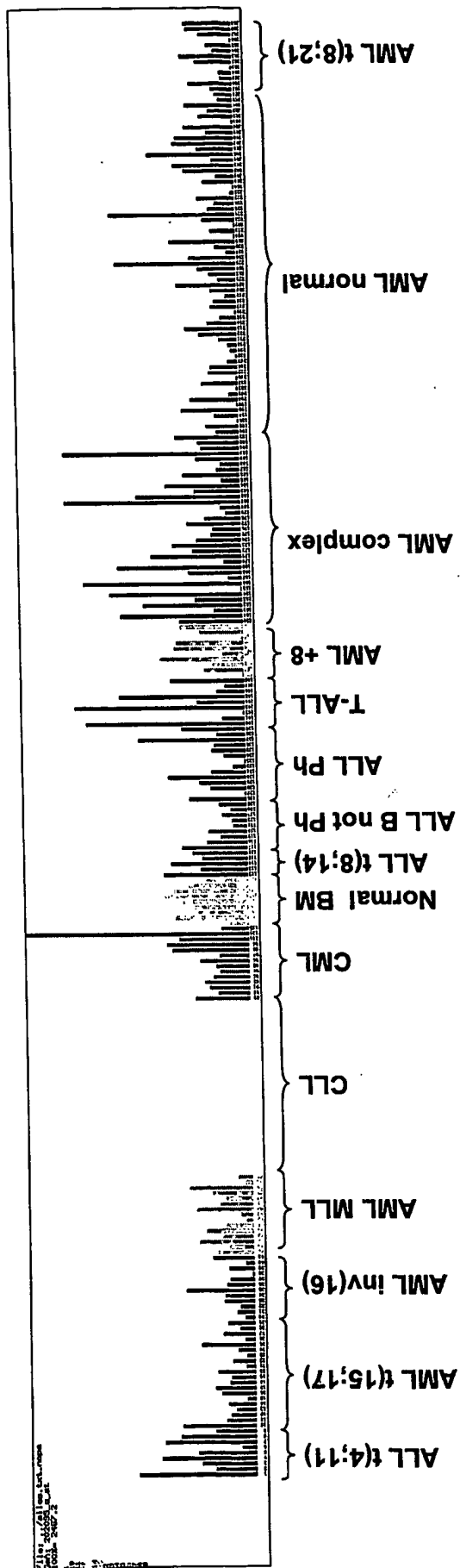
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202095\_s\_at, BIRC5, CLL

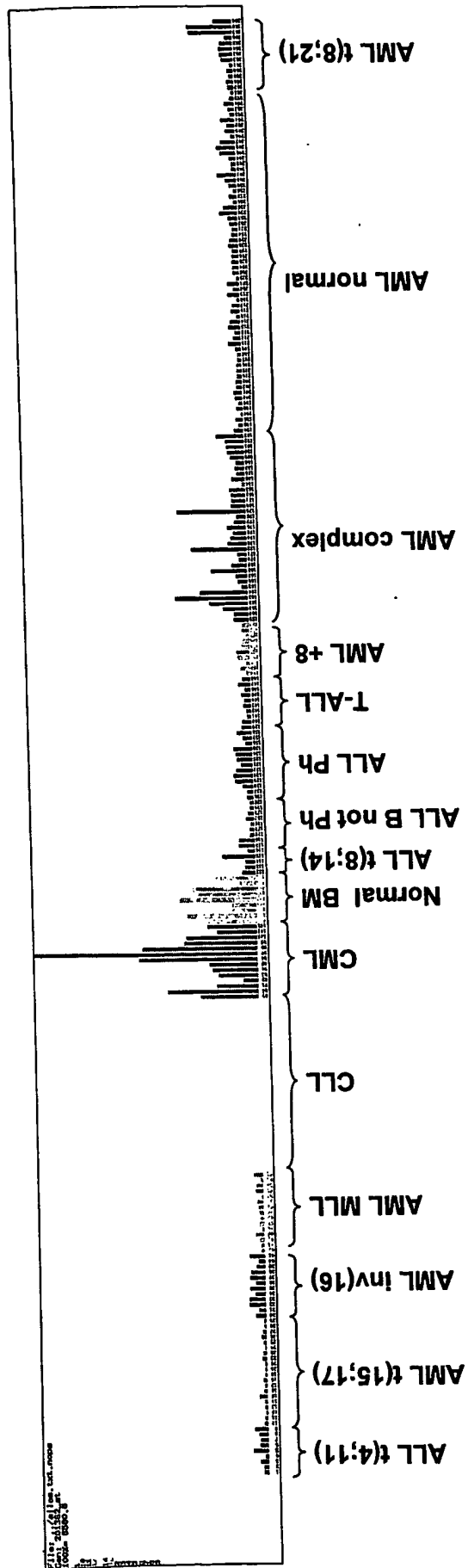
Figure 200



# 201362\_at, NS1-BP, CML

Figure 201

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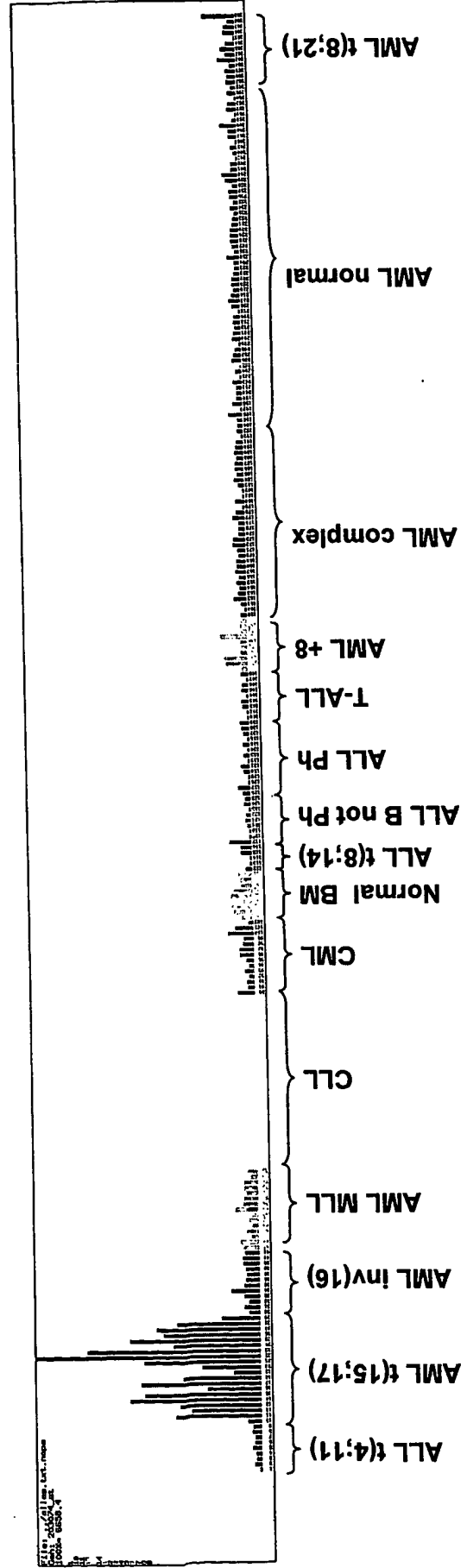


203074\_at, ANXA8, AML t(15;17)

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Figure 202

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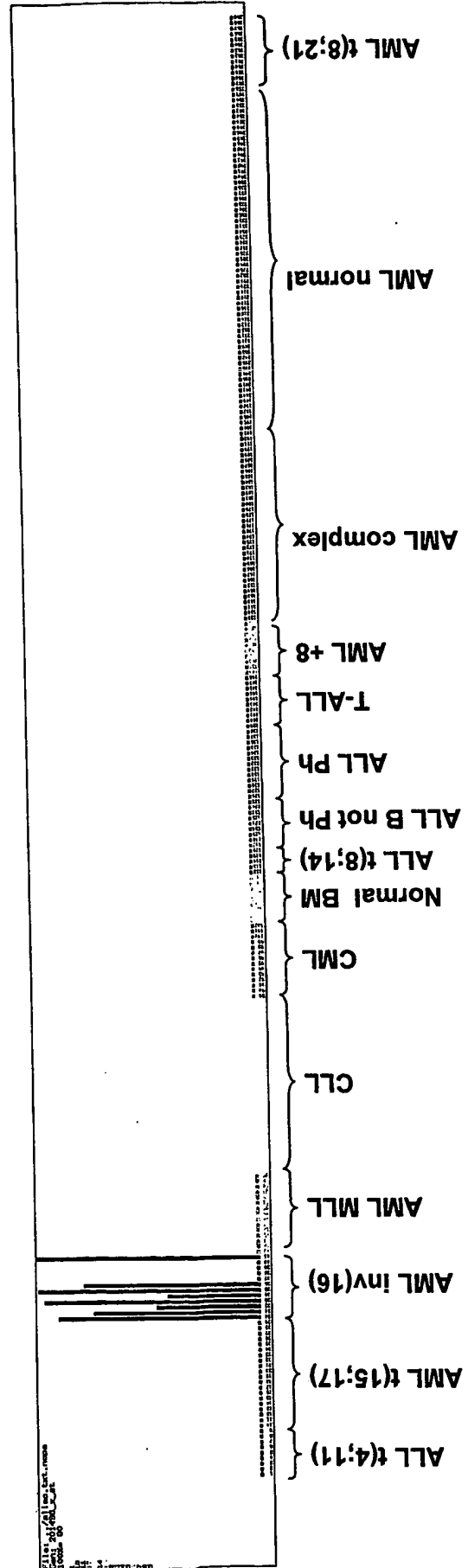
PCT/EP02/12303



# 201496\_x\_at, MYH11, AML inv(16)

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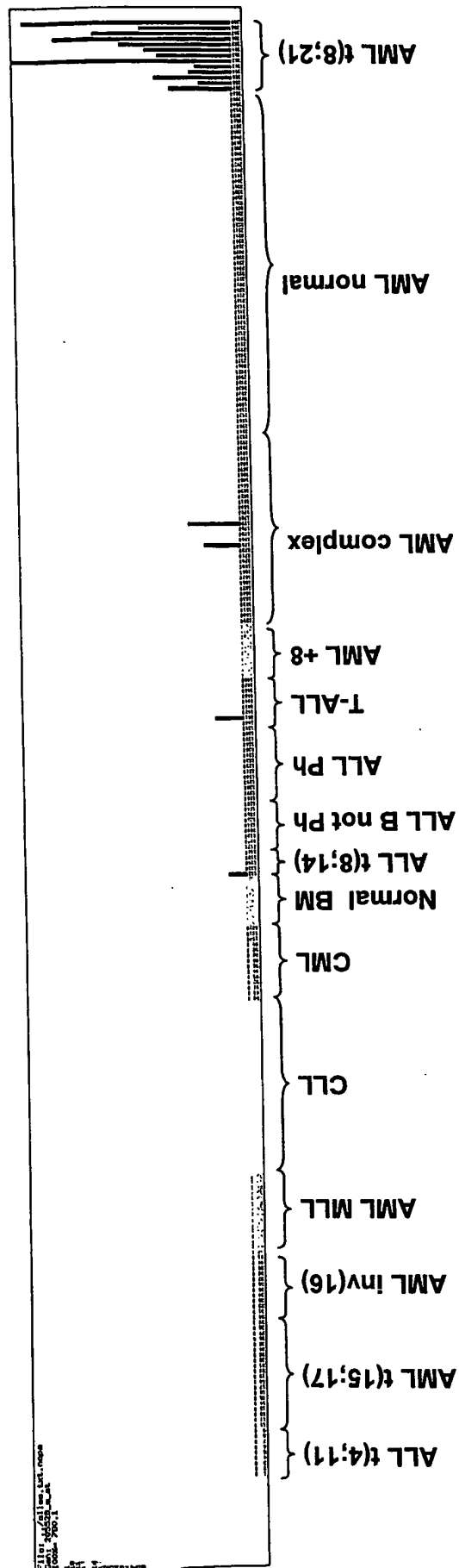
Figure 203



# 205528\_s\_at, CBFA2T1, AML t(8;21)

Figure 204

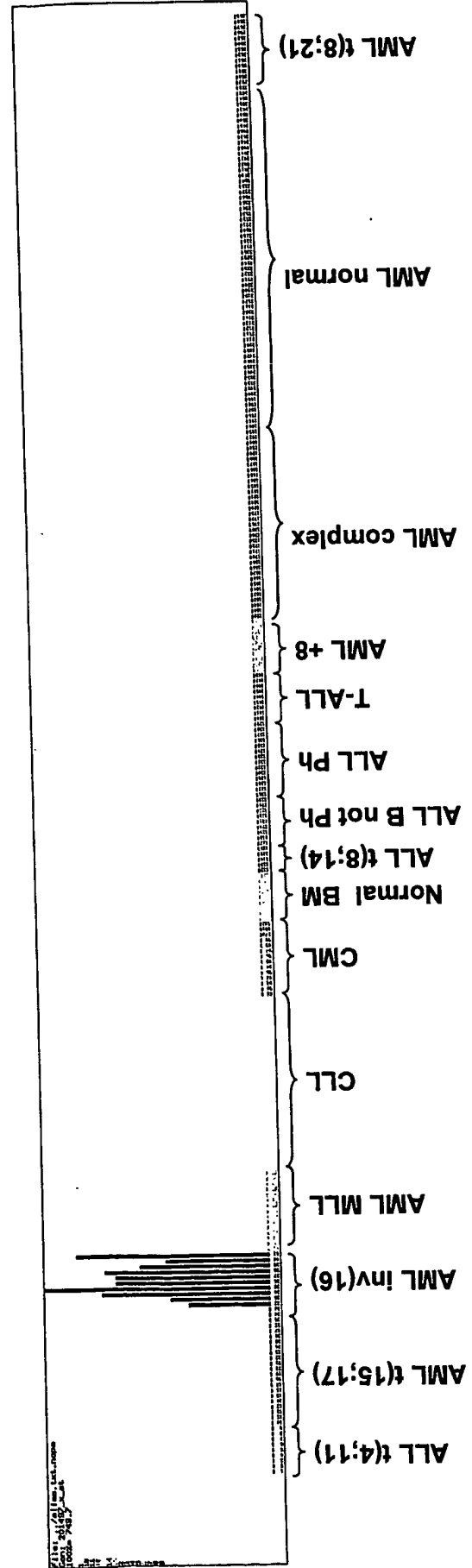
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# 201497\_x\_at, MYH11, AML inv(16)

Figure 205

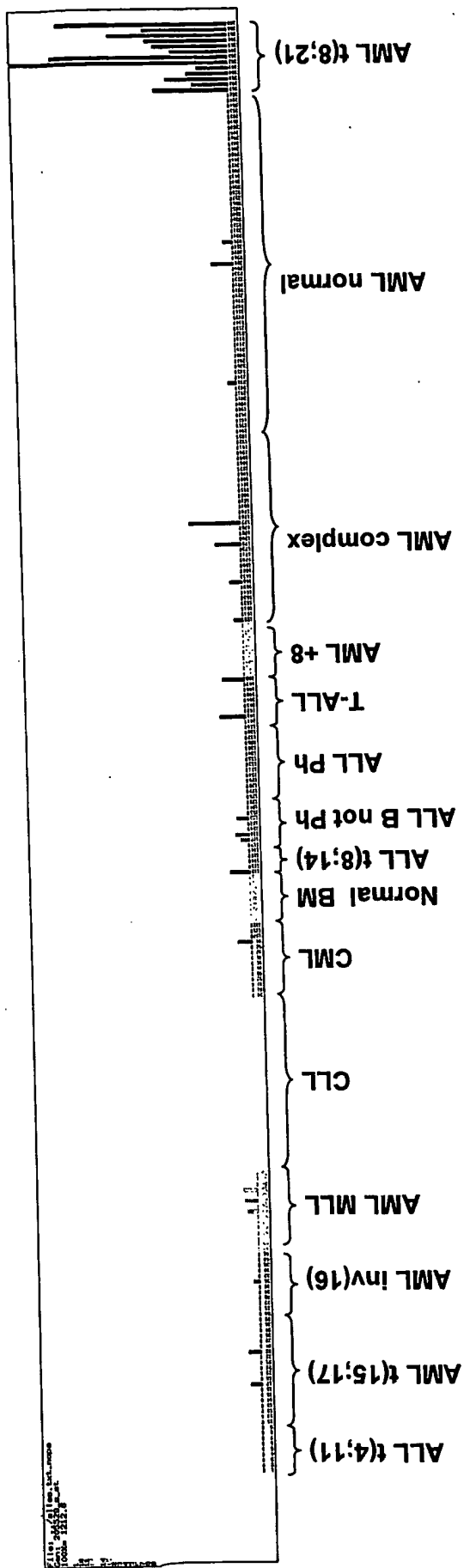
231 / 490



# 205529\_s\_at, CBFA2T1, AML t(8;21)

Figure 206

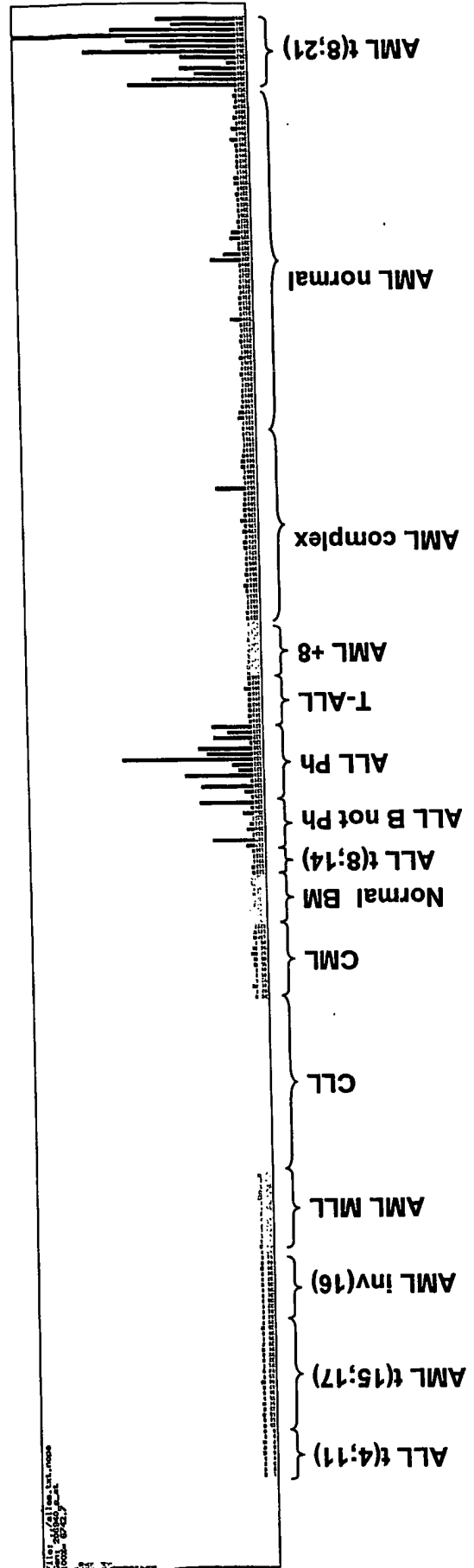
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# 206940\_s\_at, POU4F1, AML t(8;21)

Figure 207

233 / 490

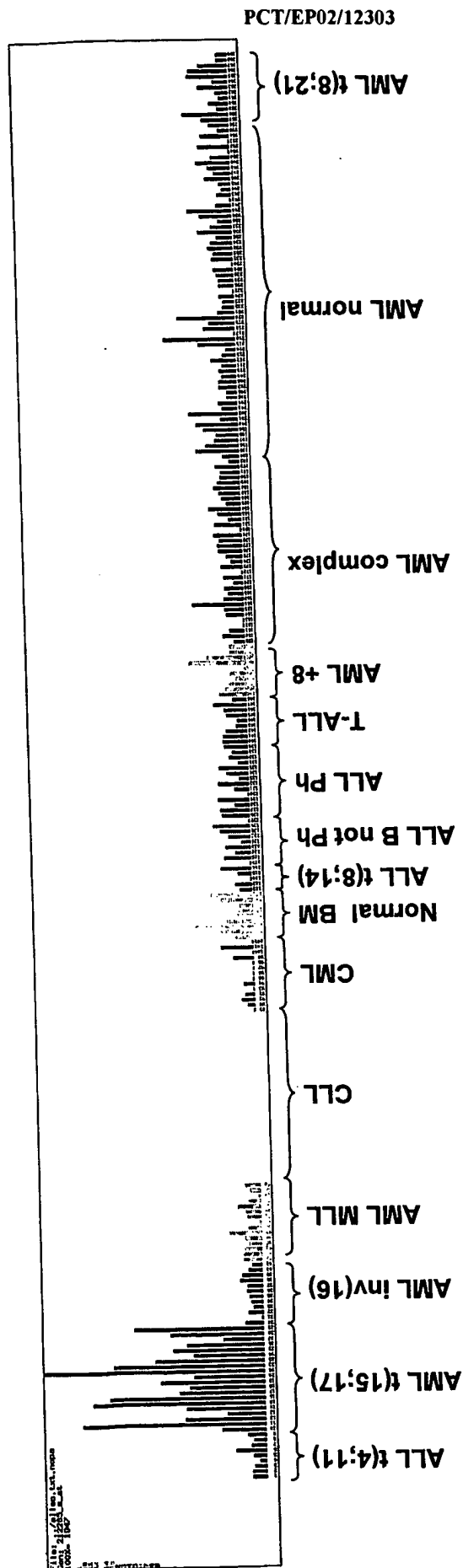


212285\_s\_at, AGRN, AML t(15;17)

WO 03/039443

Figure 208

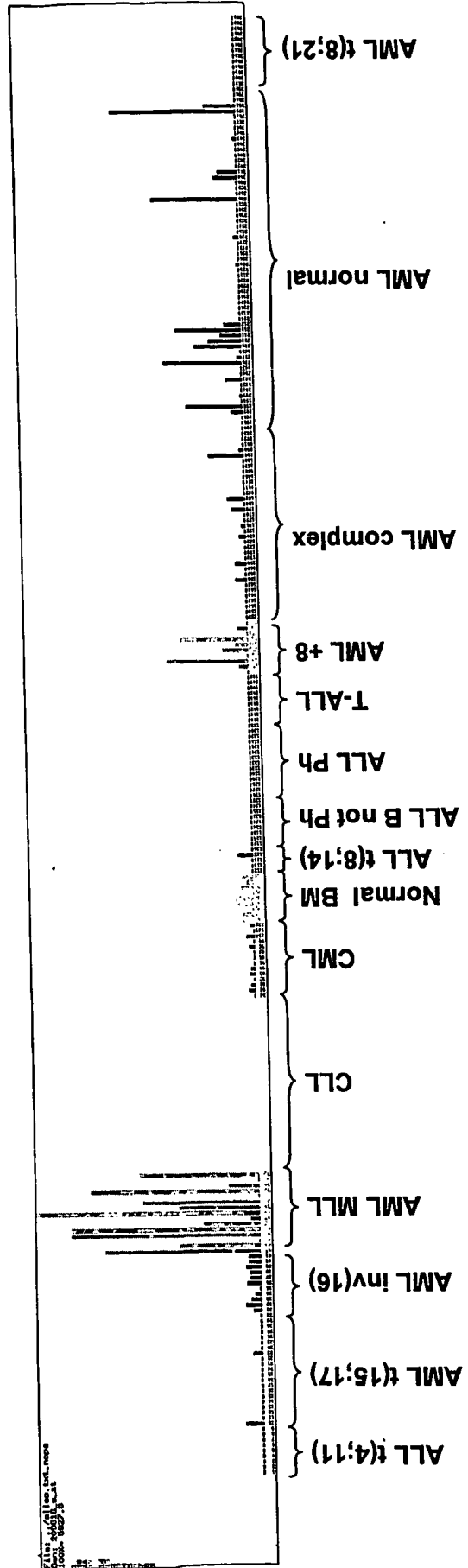
234/490



# 209616\_s\_at, CES1, AML MLL

235 / 490

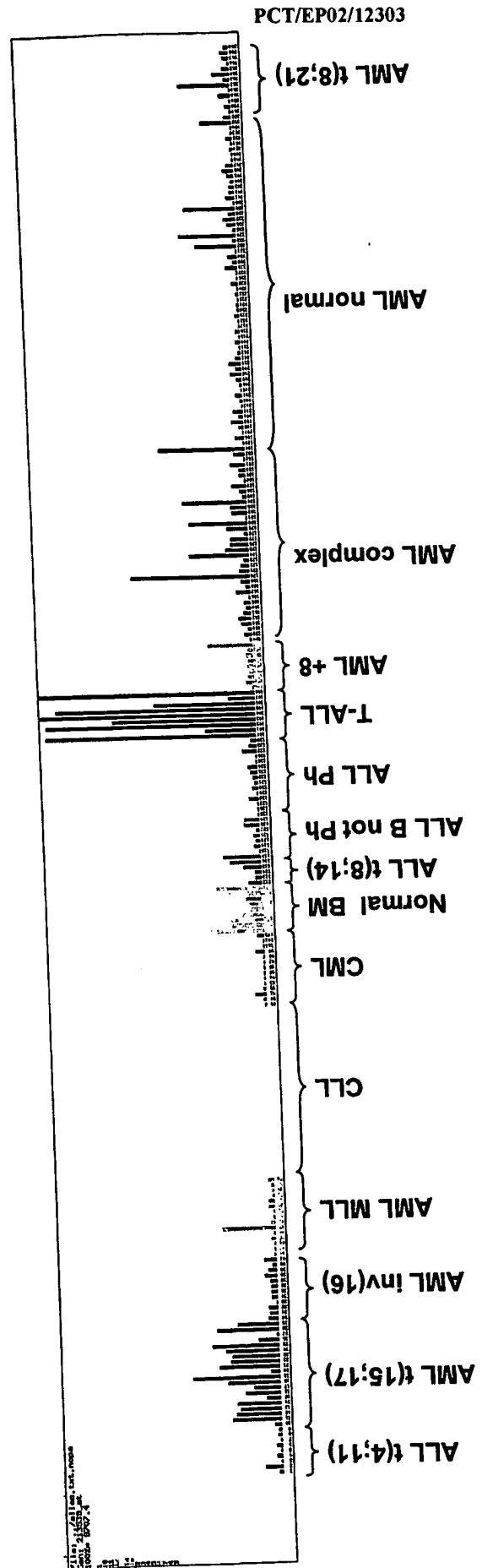
Figure 209



# 213539\_at, CD3D, T-ALL

Figure 210

236/490

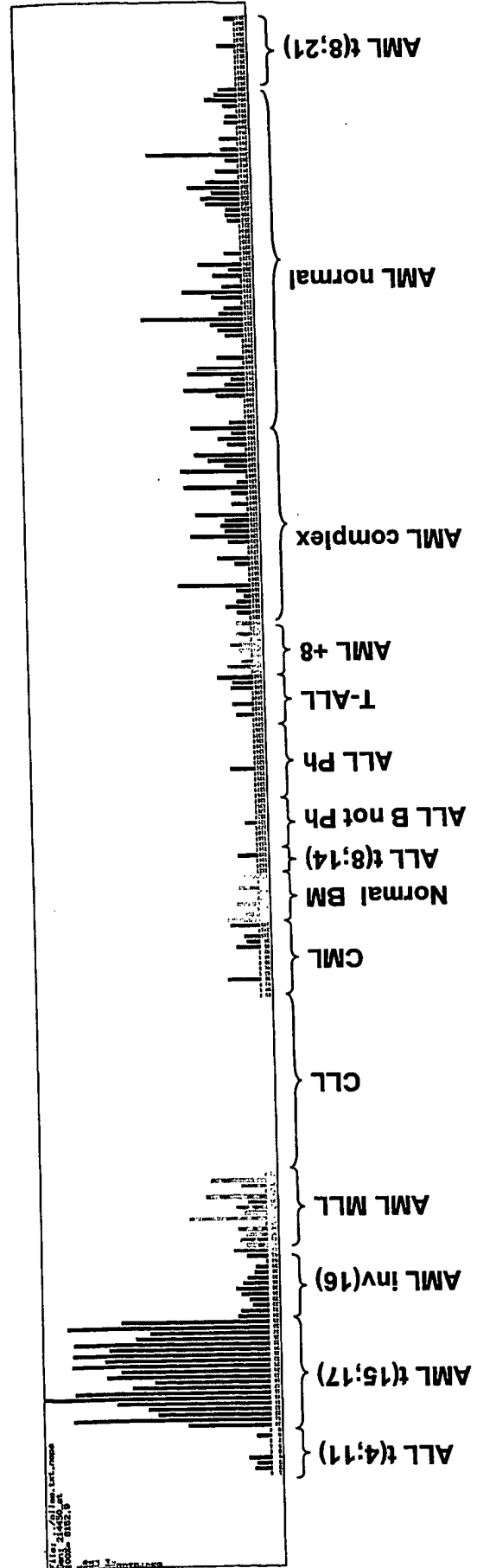




# 214450\_at, CTSW, AML t(15;17)

237/490

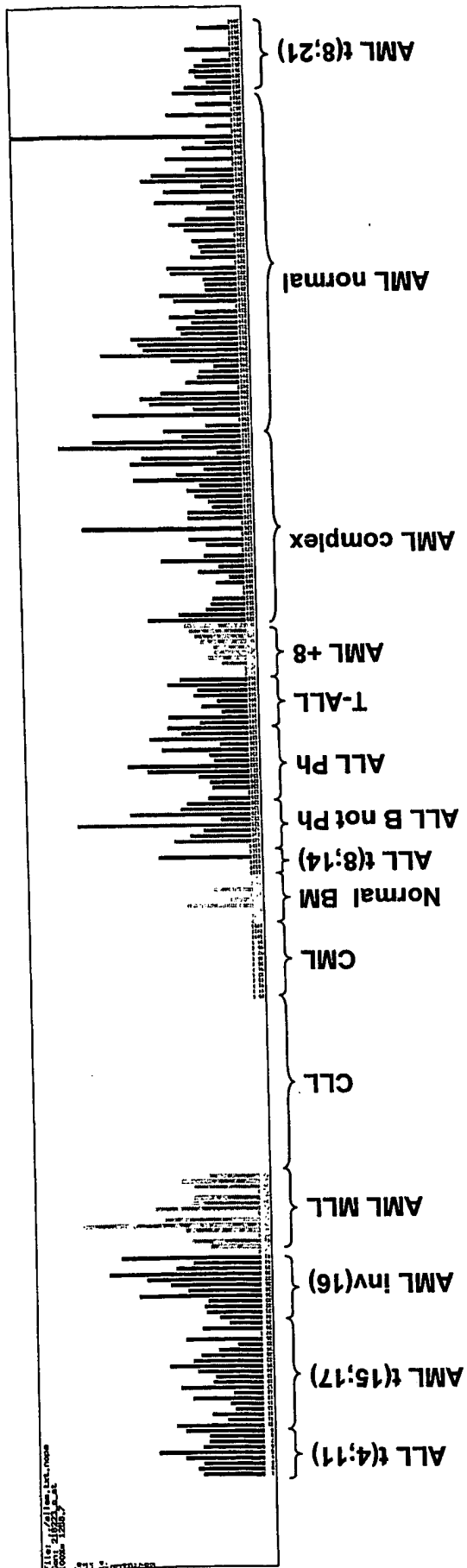
Figure 211



# 218223\_s\_at, LOC51177, CML

238/490

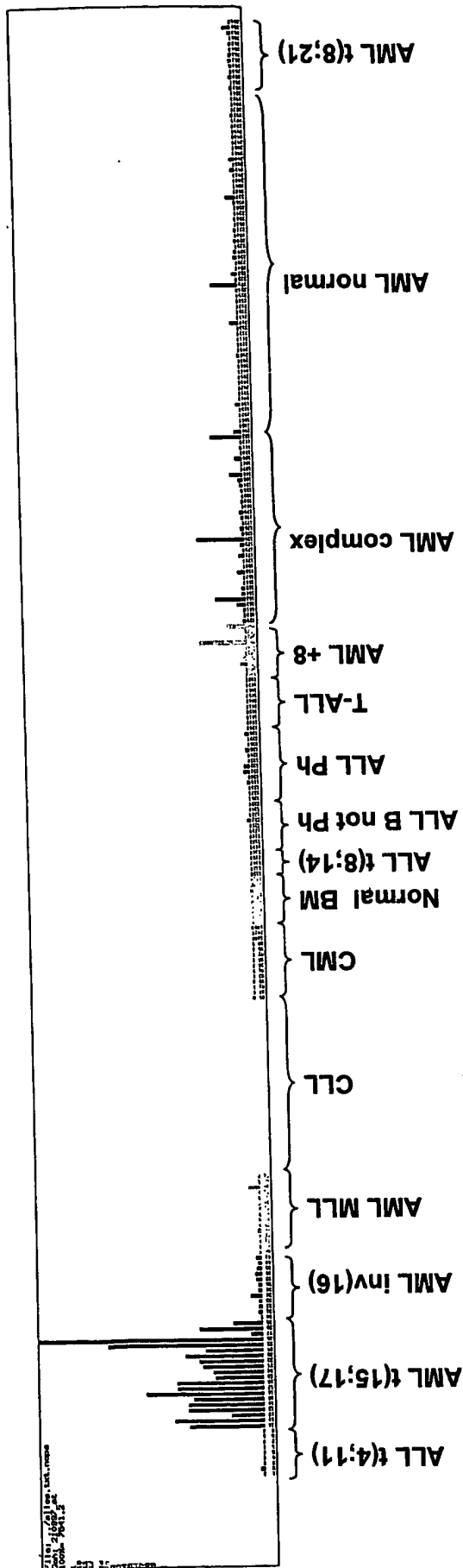
Figure 212



# 210997\_at, HGF, AML t(15;17)

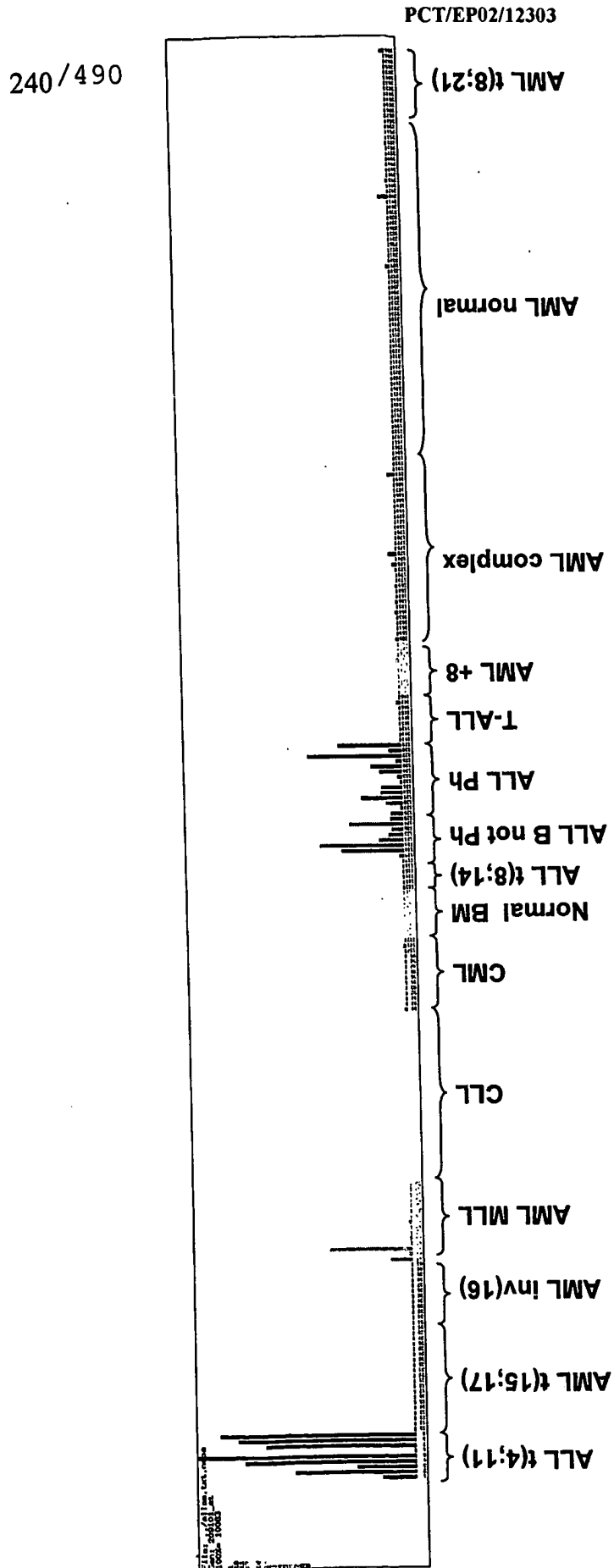
239/490

Figure 213



# 209101\_at, CTGF, ALL t(4;11), ALL Ph, T-ALL

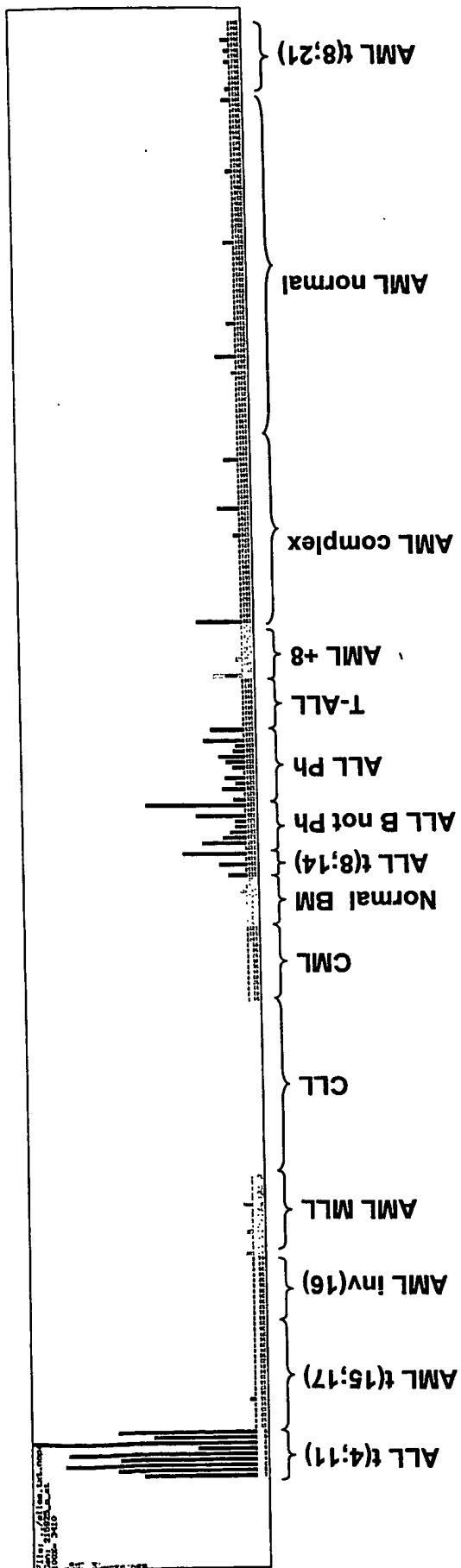
Figure 214



215925\_s\_at, ALL t(4;11)

241/490

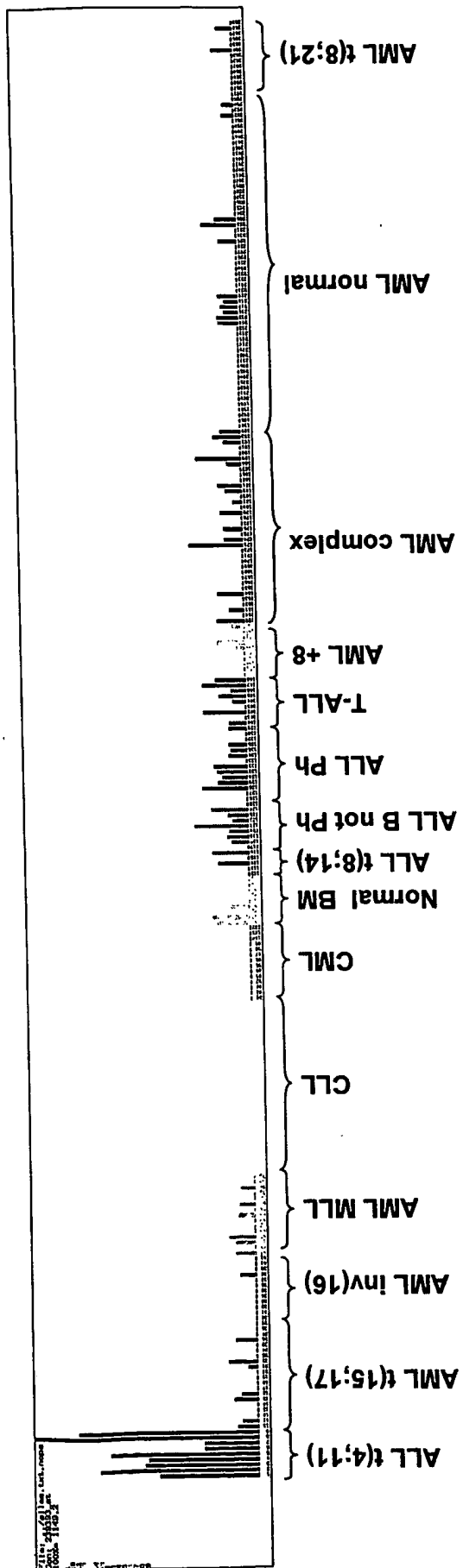
Figure 215



# 239393\_at, ALL t(4;11)

Figure 216

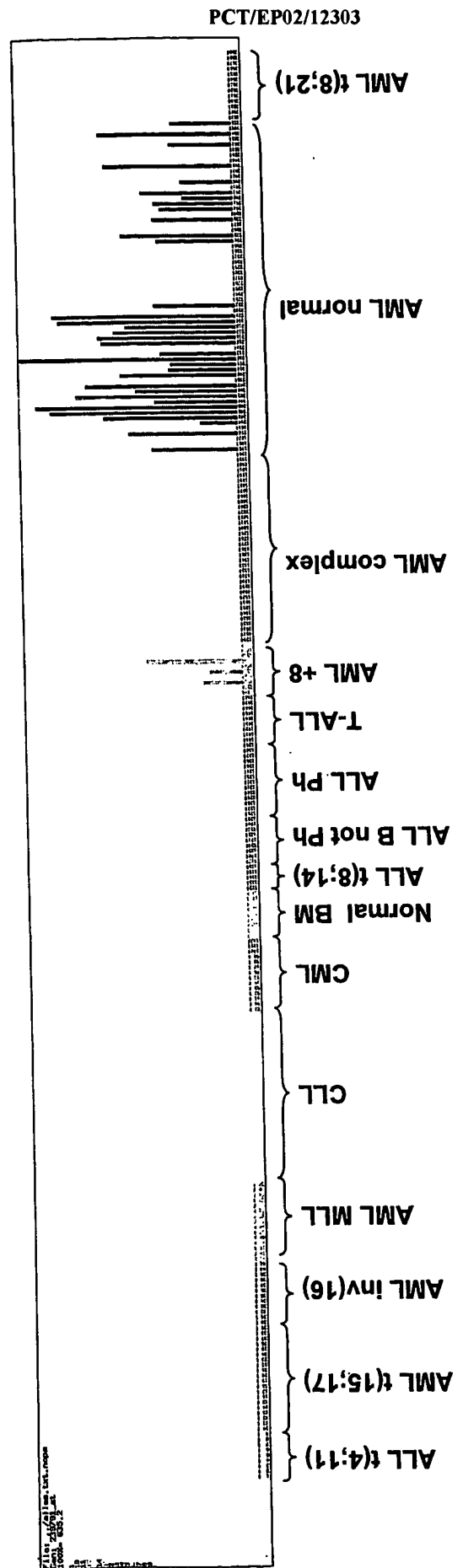
242 / 490



# 239791\_at, HOXB6, AML normal, AML +8

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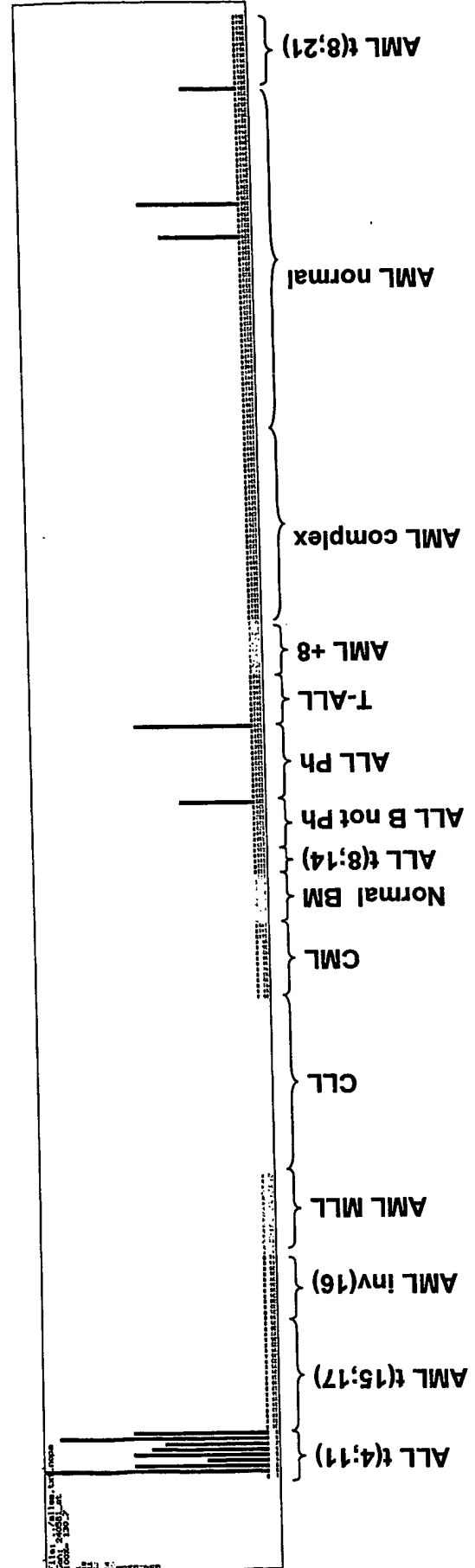
Figure 217



244/490

240581\_at, ALL t(4;11)

Figure 218

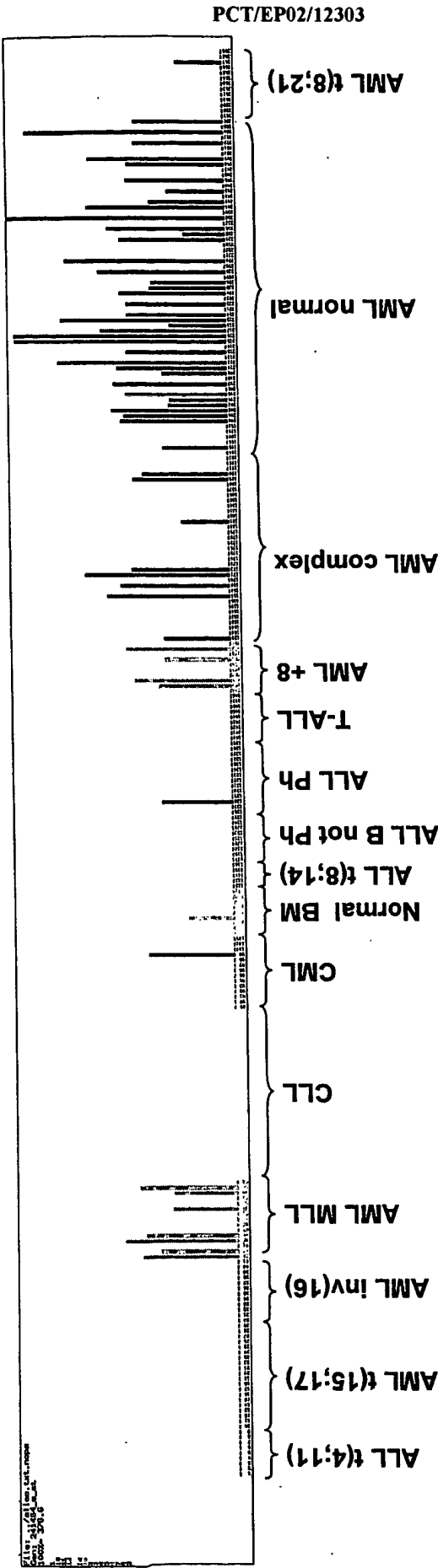




241464\_s\_at, AML MLL, AML normal, AML +8, AML complex

245/490

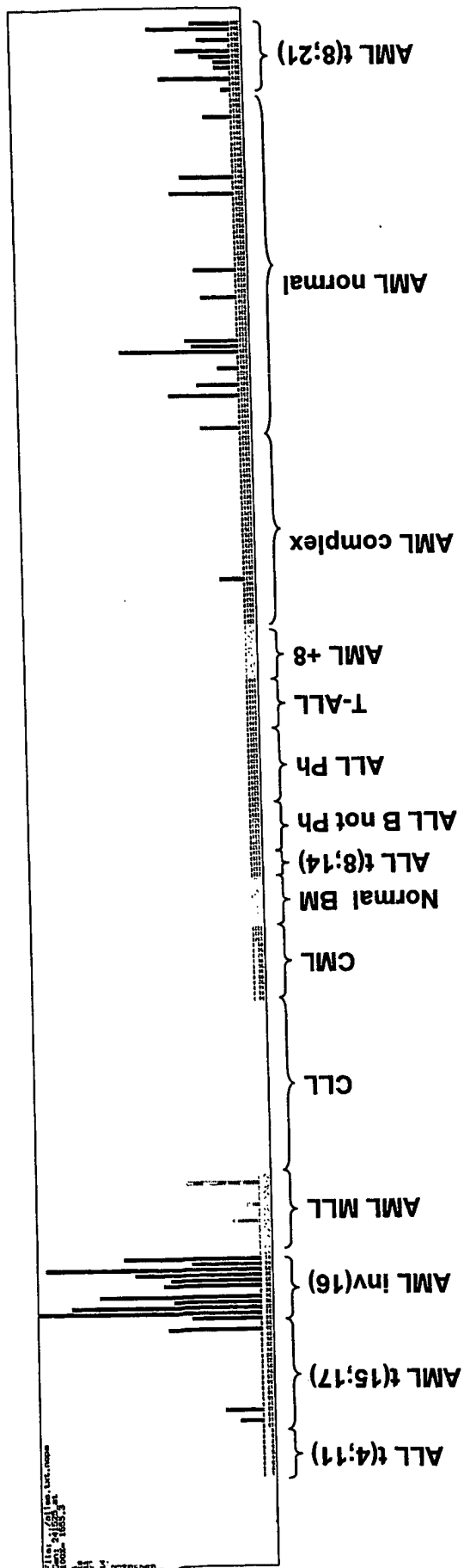
Figure 219



# 241525\_at, AML inv(16)

246/490

Figure 220

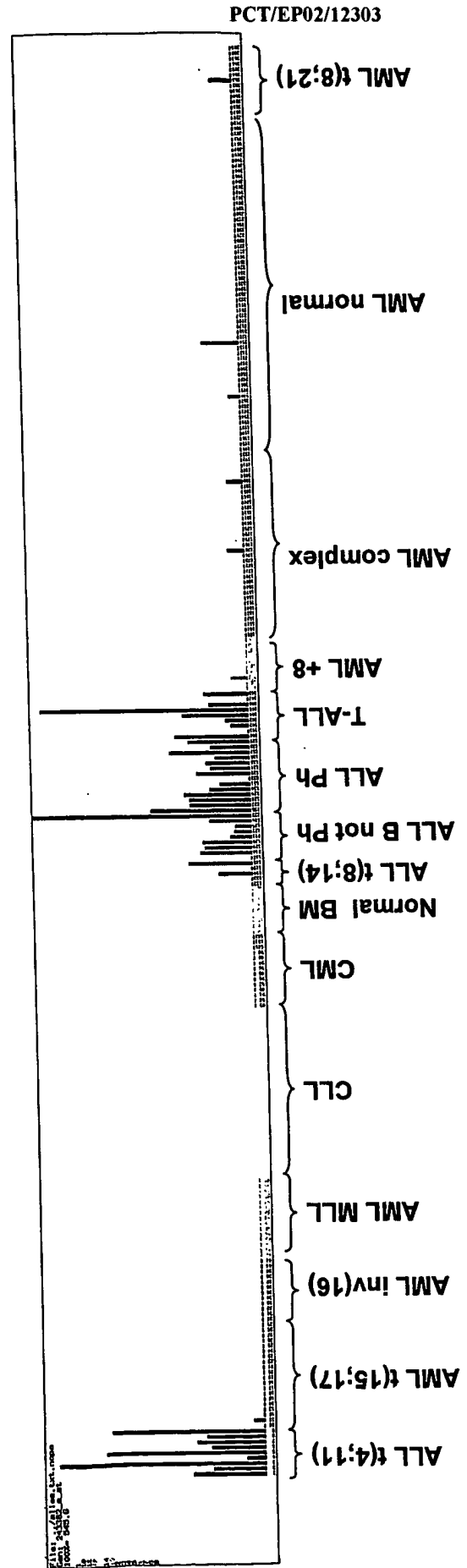


243362\_s\_at, LEF1, ALL, CLL

WO 03/039443

Figure 221

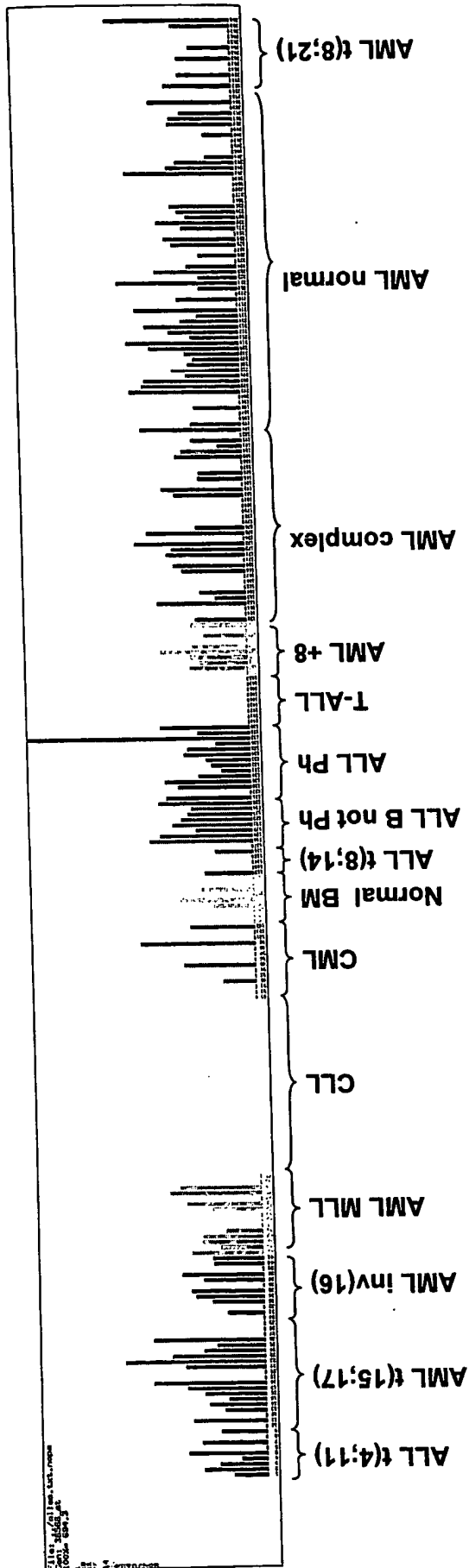
247/490



# 36566\_at, CTNS, T-ALL

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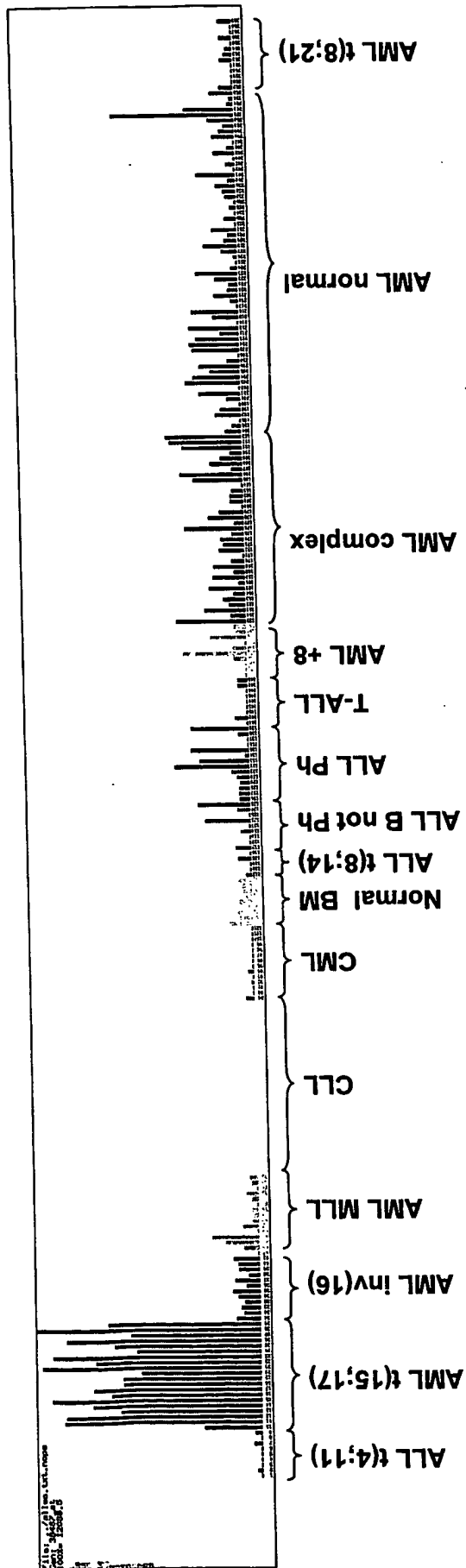
Figure 222



38487\_at, FLJ12442, AML t(15;17)

Figure 223

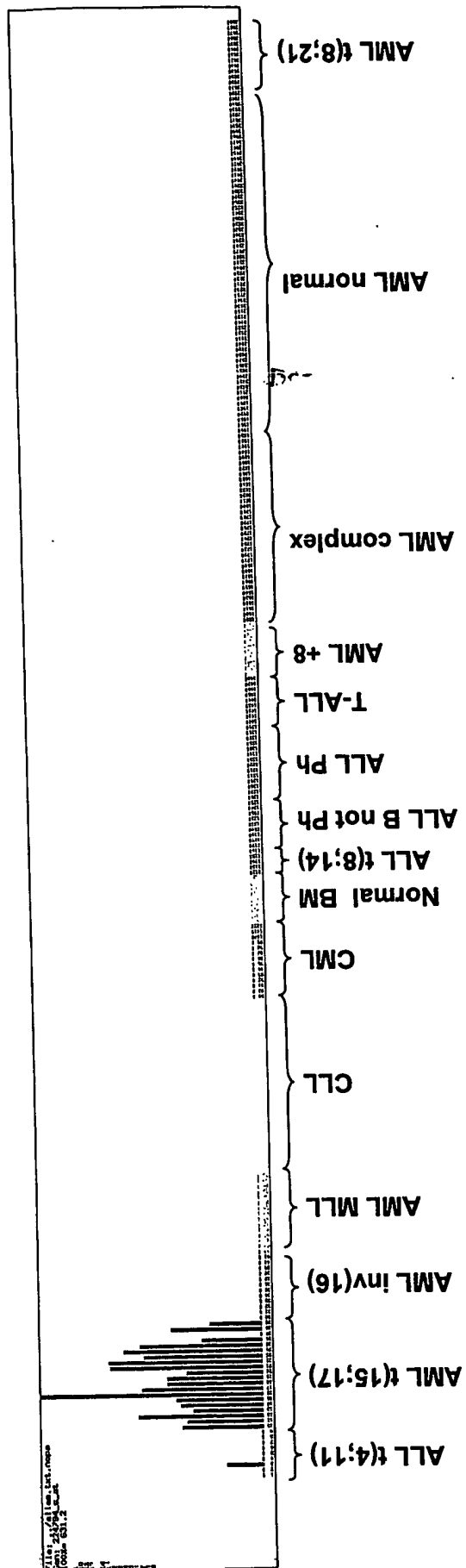
249 / 490



# 224794\_s\_at, LOC51148, AML t(15;17)

250 / 490

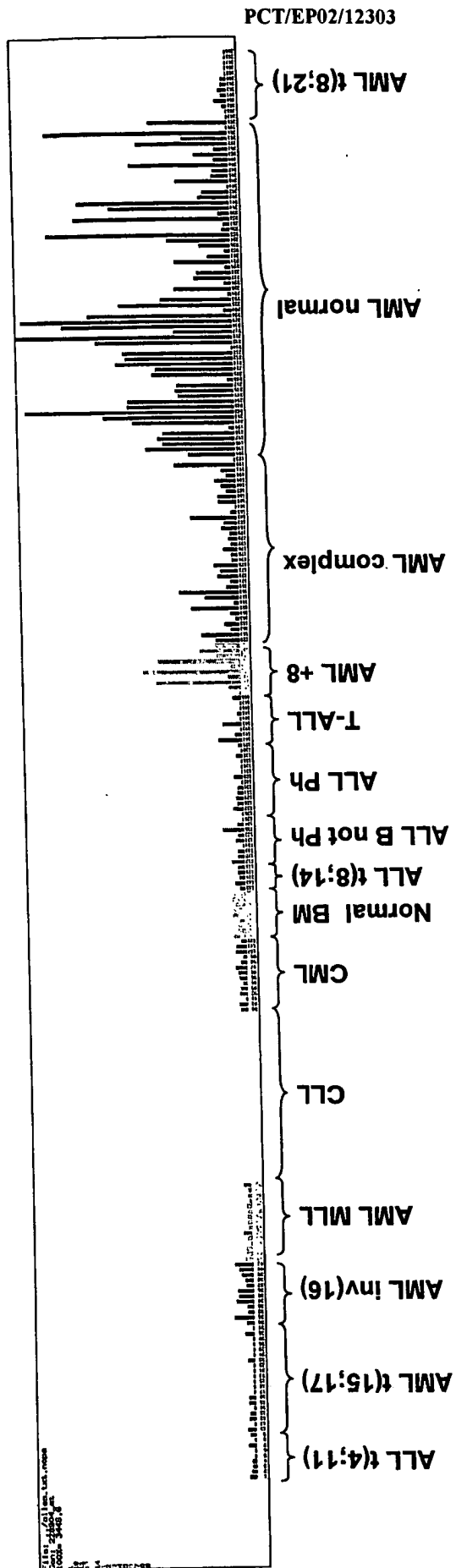
Figure 224



# 228904\_at, AML normal, AML +8, AML complex

Figure 225

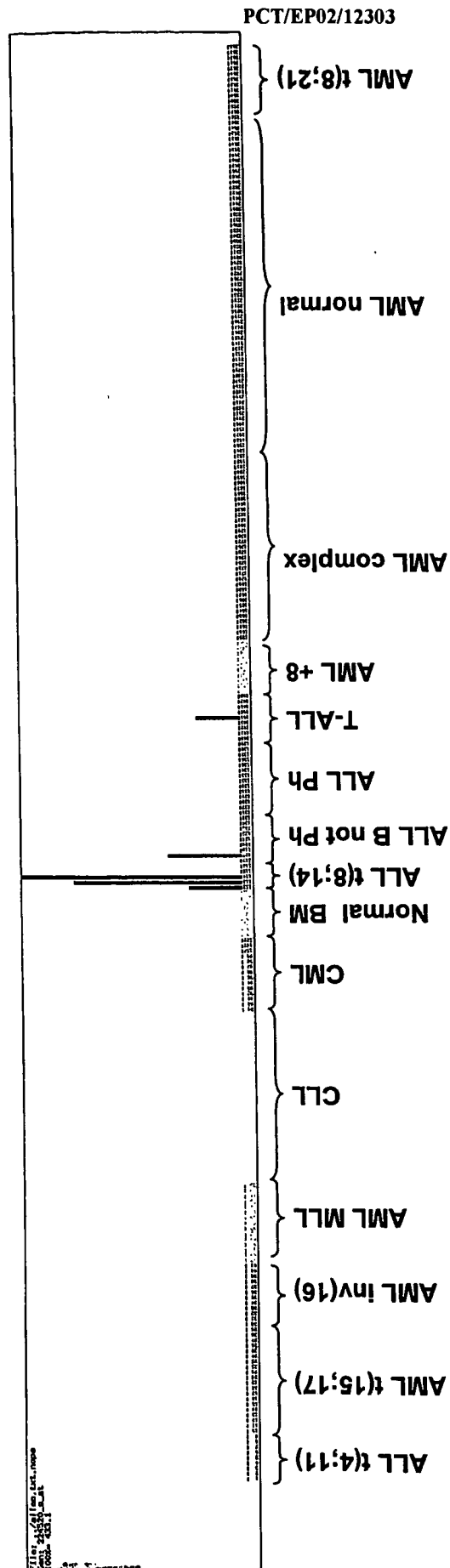
251 / 490



# 224520\_s\_at, MGC13168, ALL t(8;14)

Figure 226

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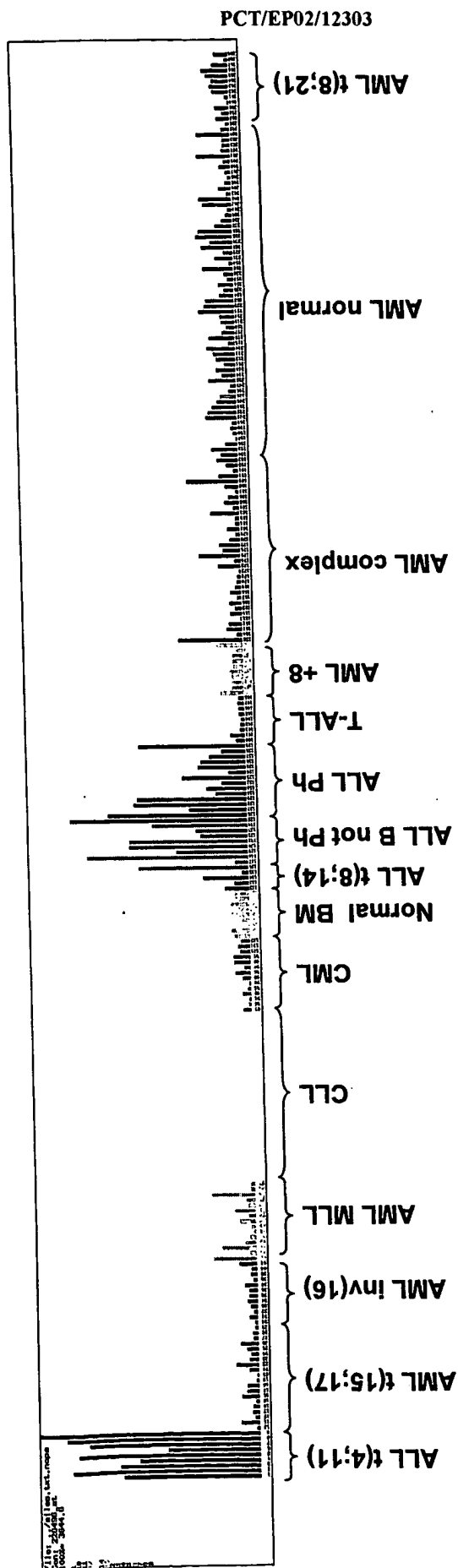




# 226496\_at, ALL, CLL

Figure 227

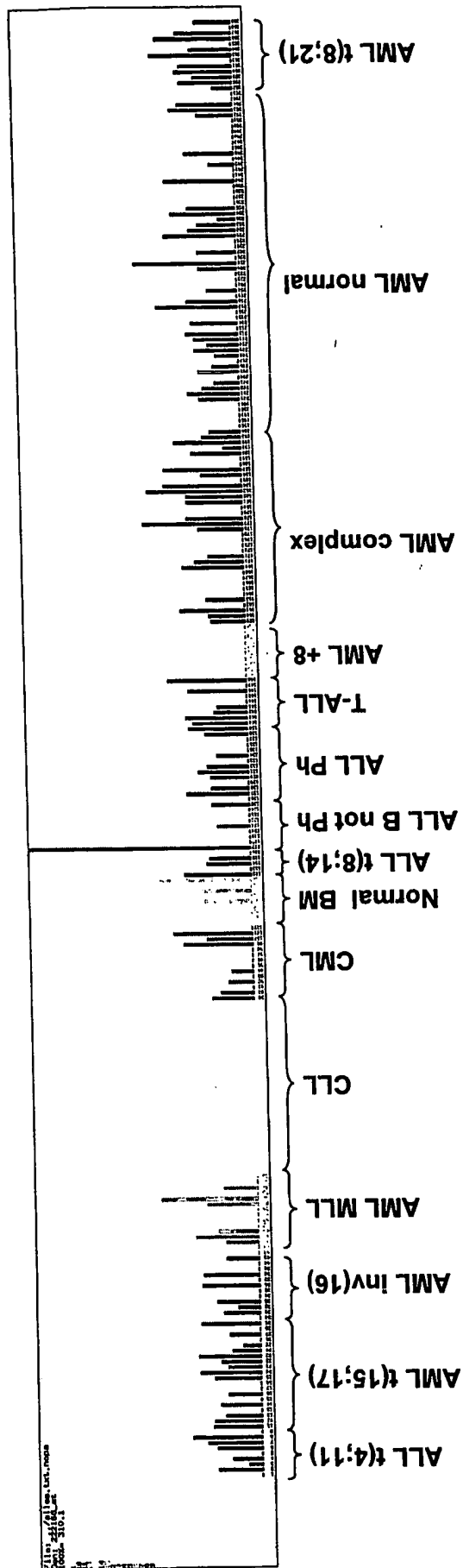
253 / 490



# 222166\_at, AML +8

Figure 228

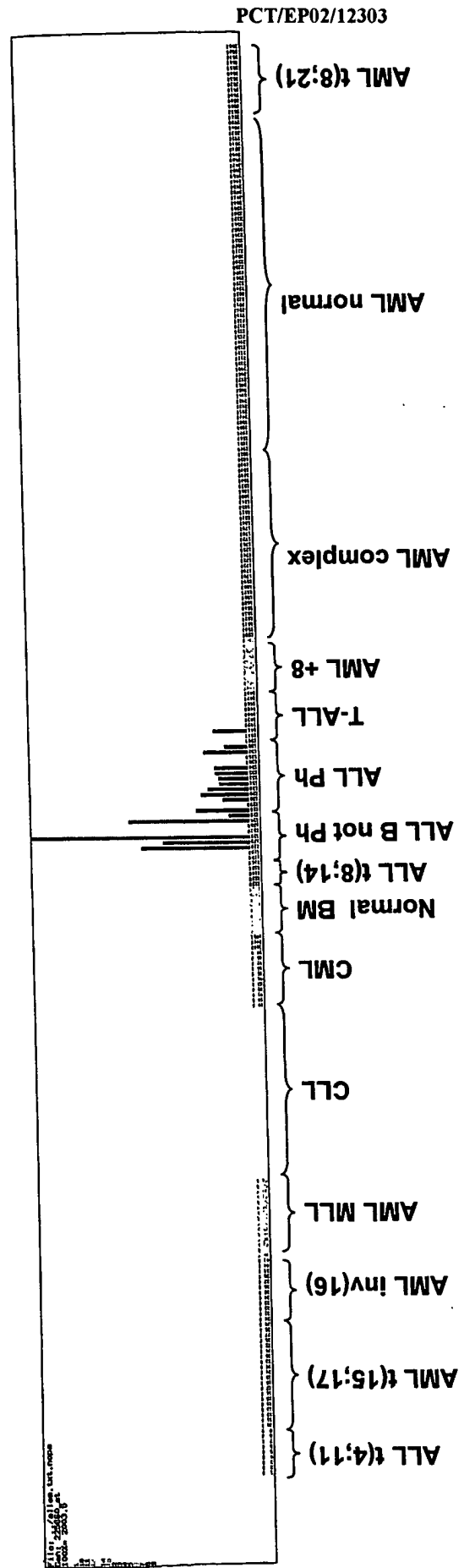
254 / 490



# 225660\_at, SEMA6A, ALL B not Ph, ALL Ph

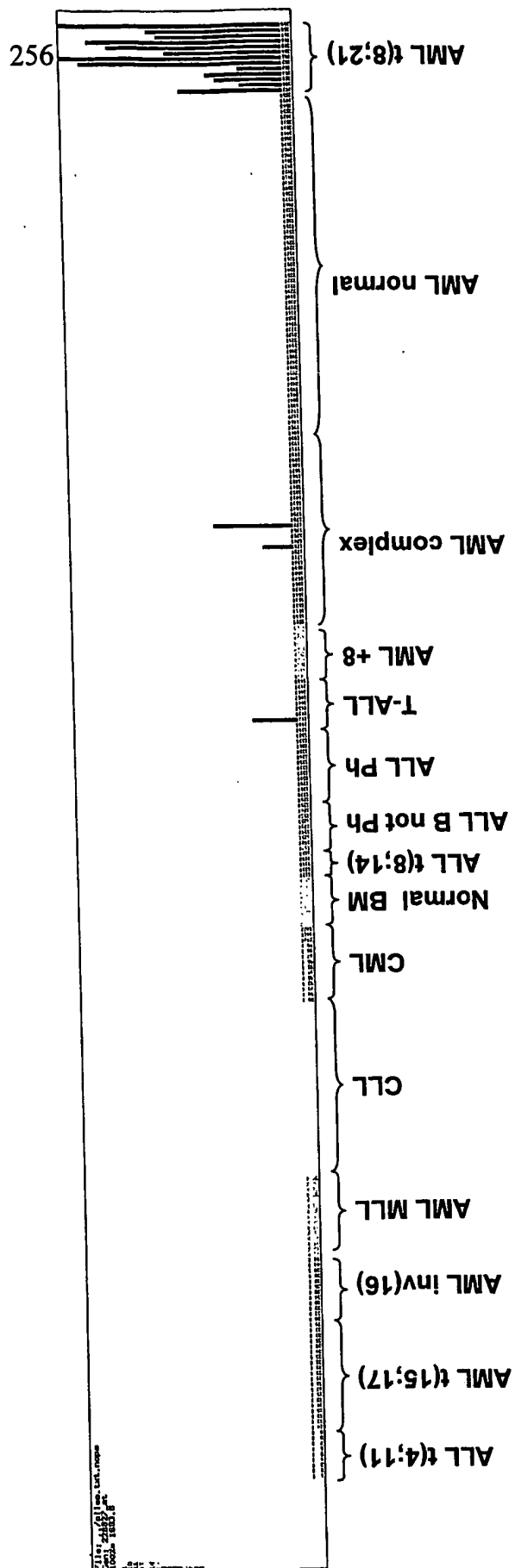
255 / 490

Figure 229



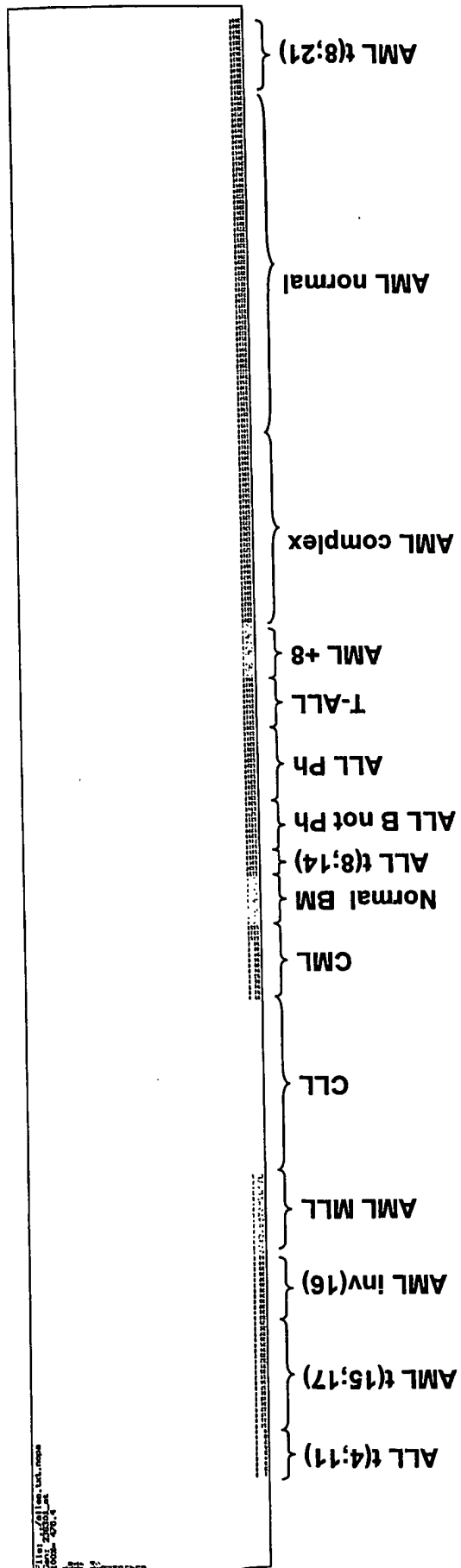
# 228827\_at, AML t(8;21)

Figure 230



236301\_at, CLL

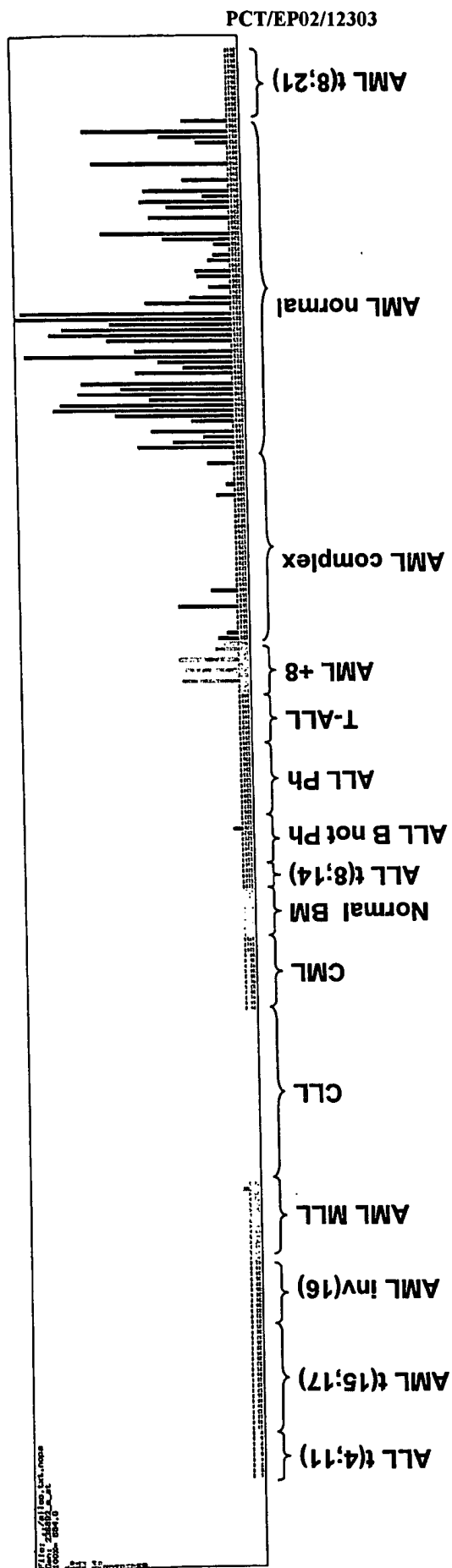
Figure 231



# 236892\_s\_at, HOXB6, AML normal, AML +8, AML complex

Figure 232

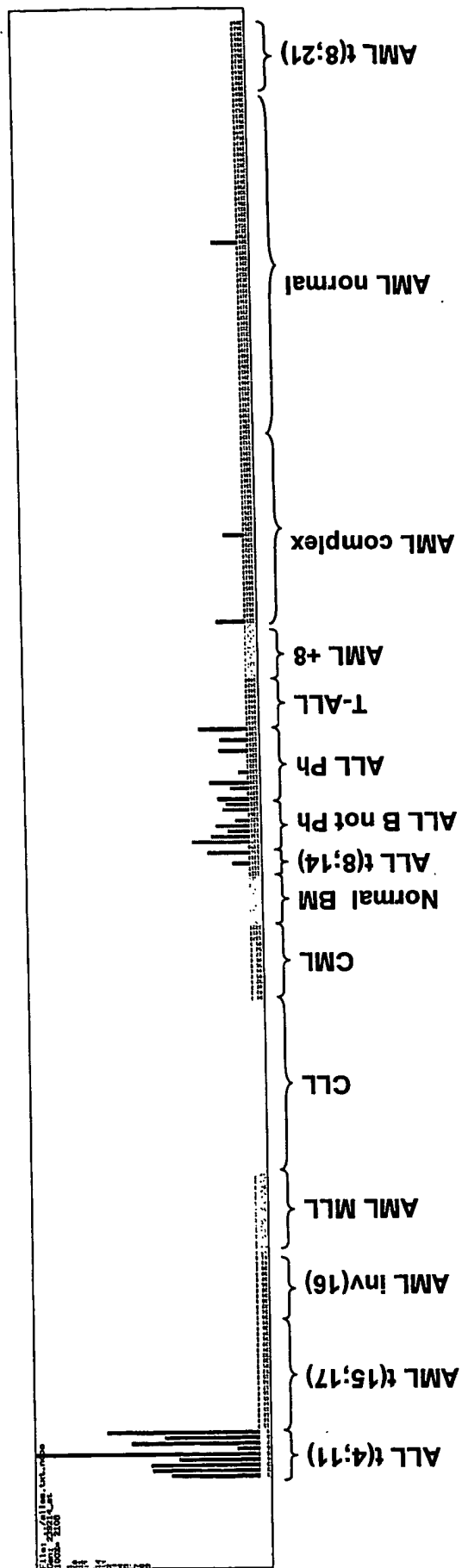
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239214\_at, ALL t(4;11)

259/490

Figure 233



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219033\_at, FLJ21308, ALL t(4;11) vs. all other

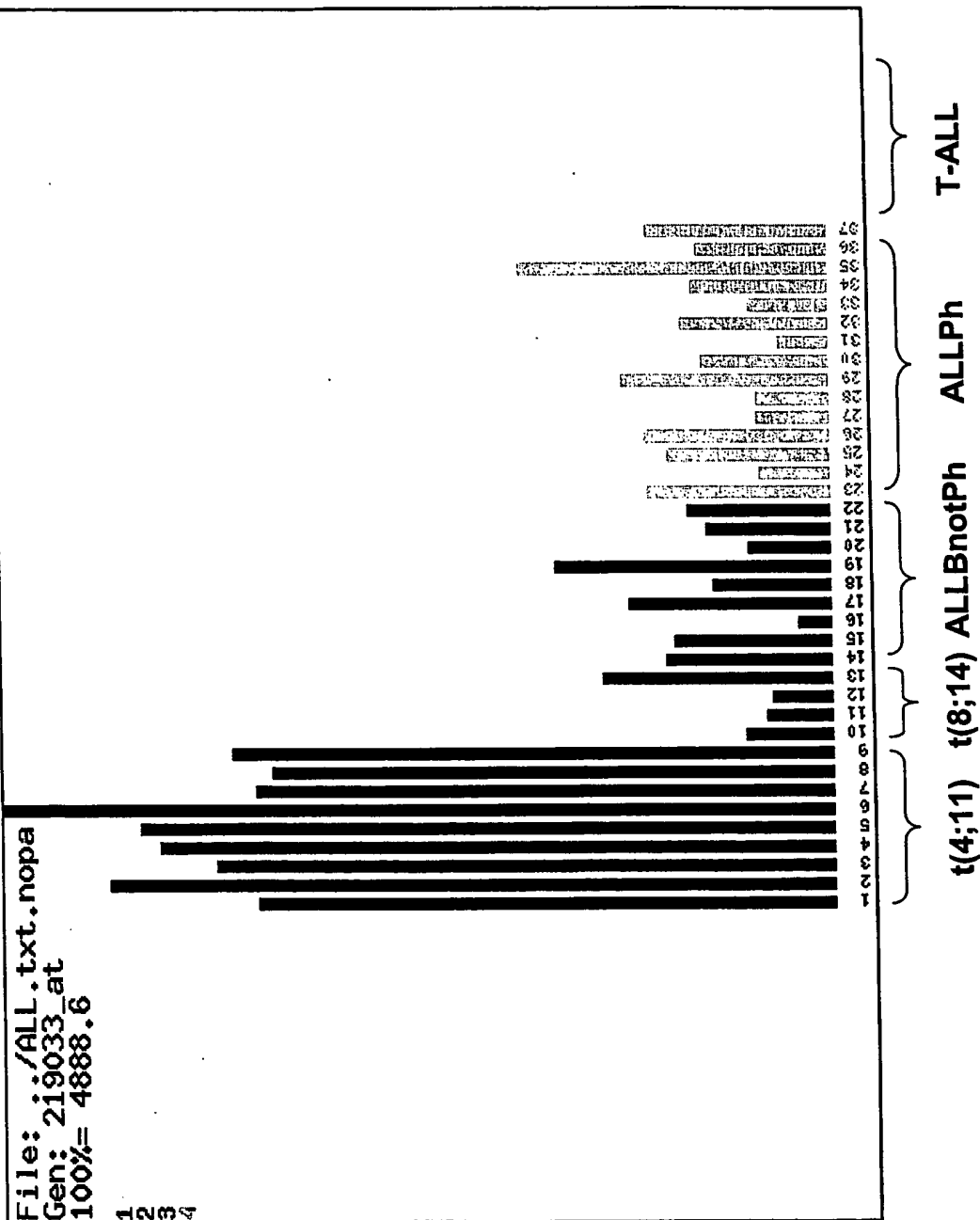


Figure 234



210045\_at, IDH2, ALL t(4;11) vs. ALL t(8;14)

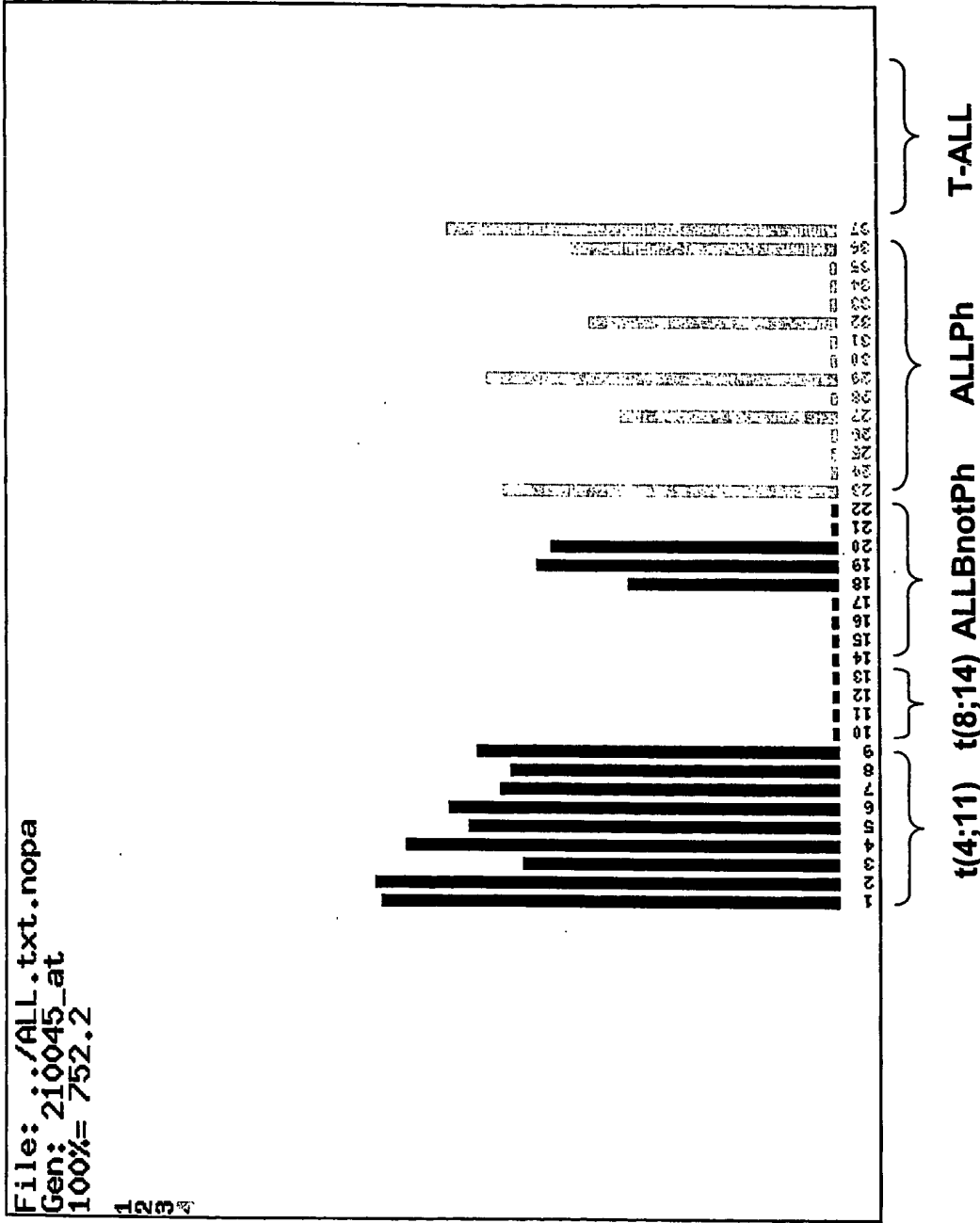


Figure 235

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# 237431\_at, ALL t(4;11) vs. ALL B not Ph

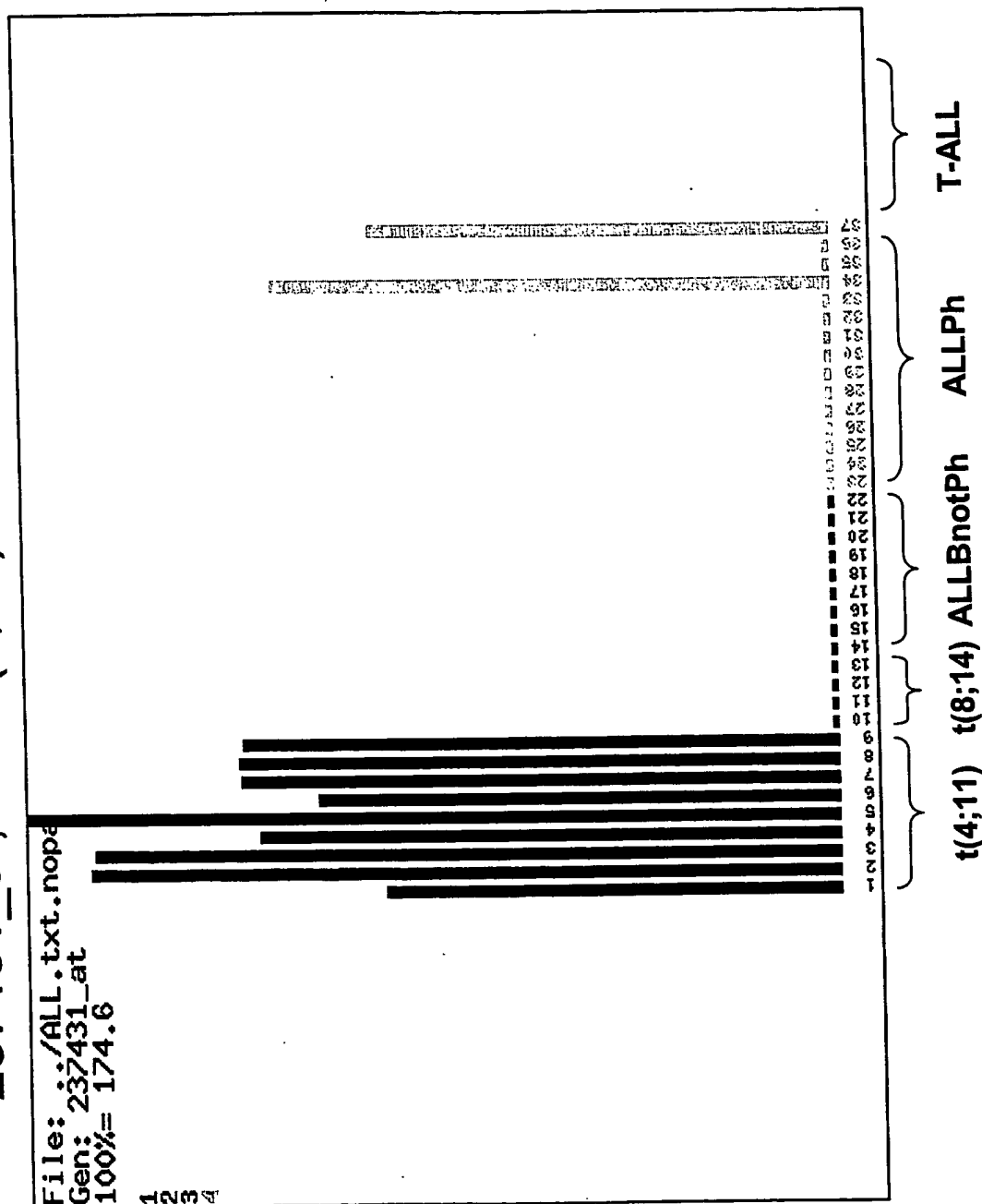


Figure 236

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# 204069\_at, MEIS1, ALL t(4;11) vs. ALL Ph

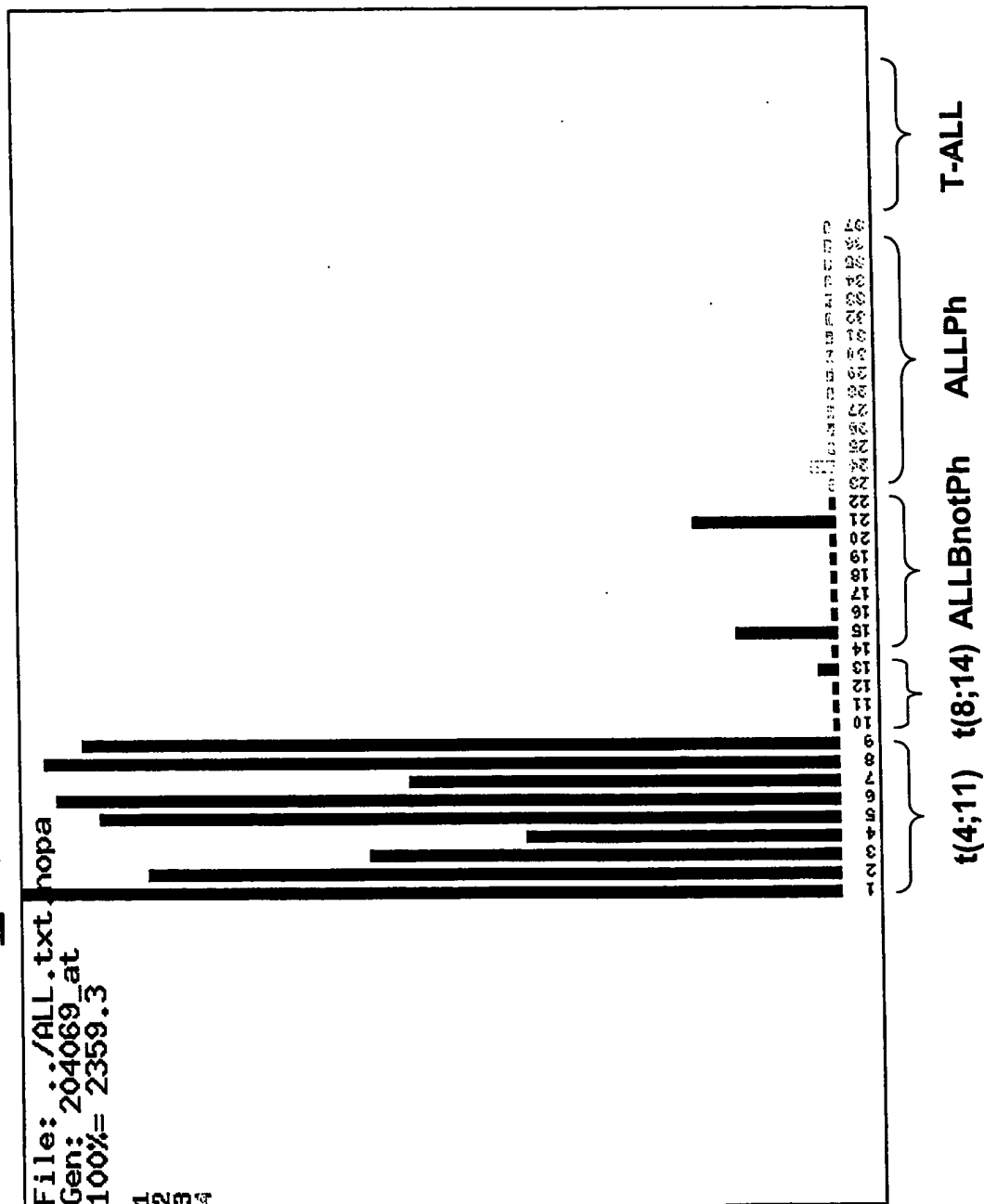


Figure 237

221969\_at, PAX5, ALL t(4;11) vs. T-ALL

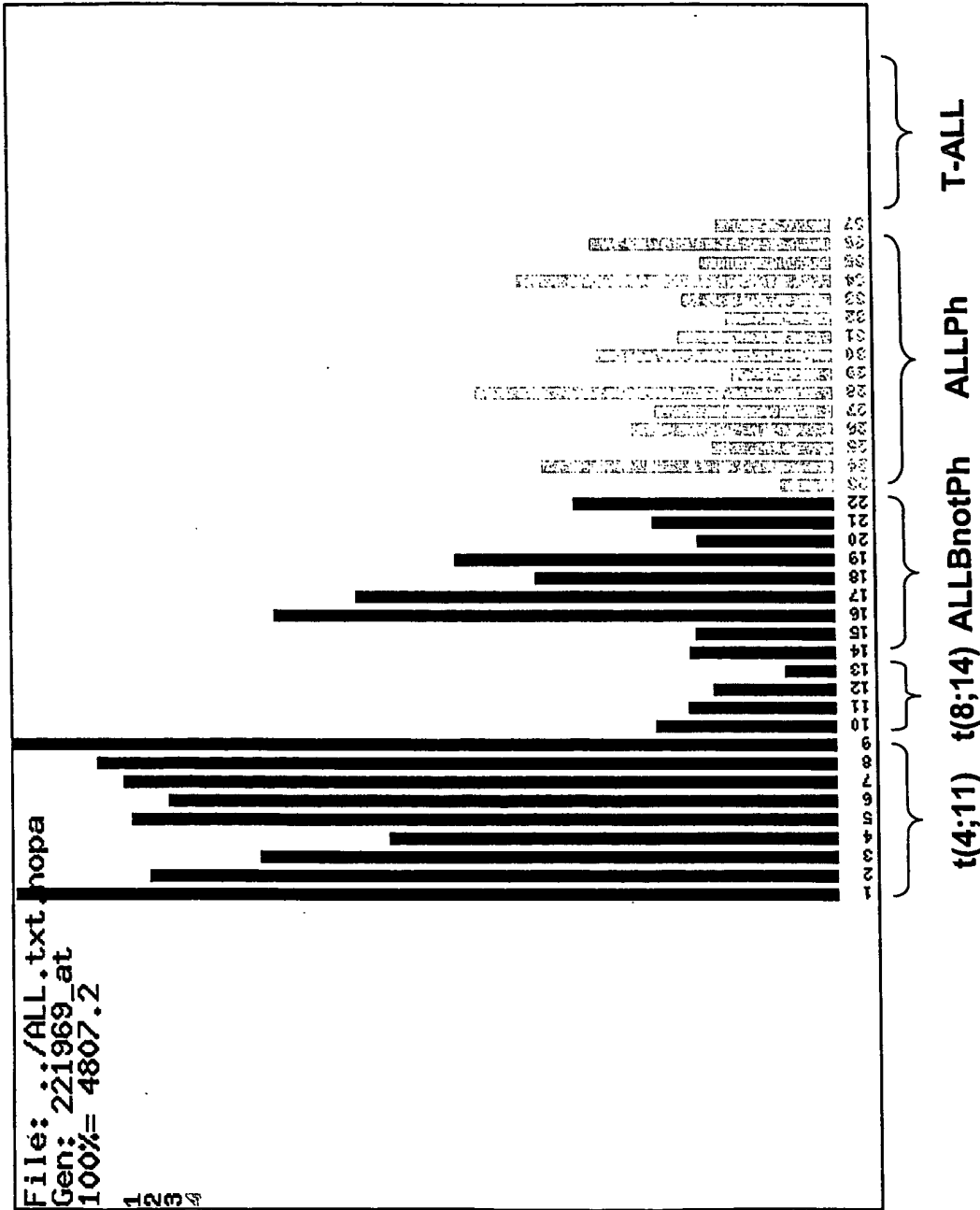


Figure 238

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# 228211\_at, ALL t(8;14) vs. all other

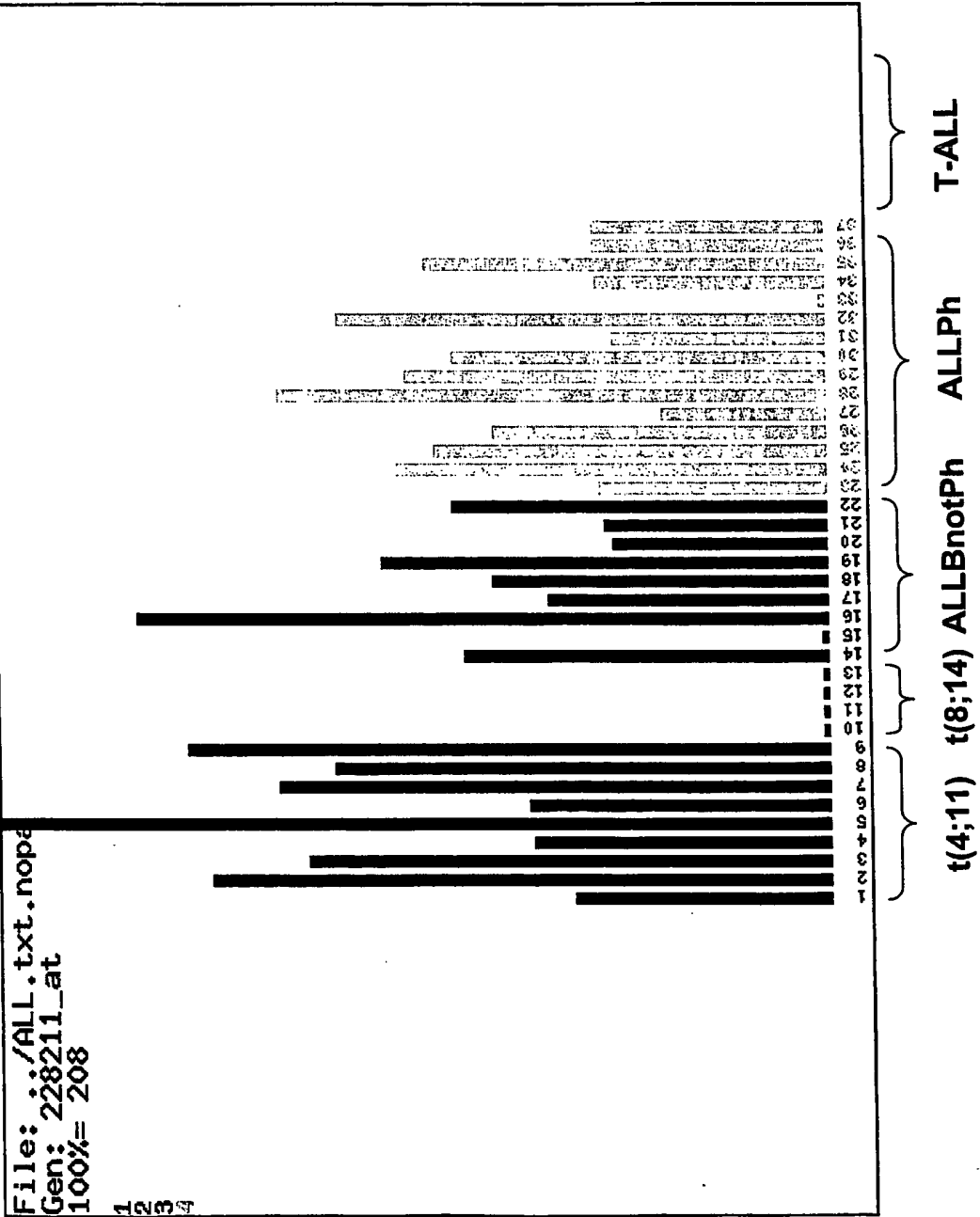


Figure 239

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202249\_s\_at, H326, ALL t(8;14) vs. all other

File: ./ALL.txt.nopa  
Gen: 202249\_s\_at  
100%= 403.1

13334

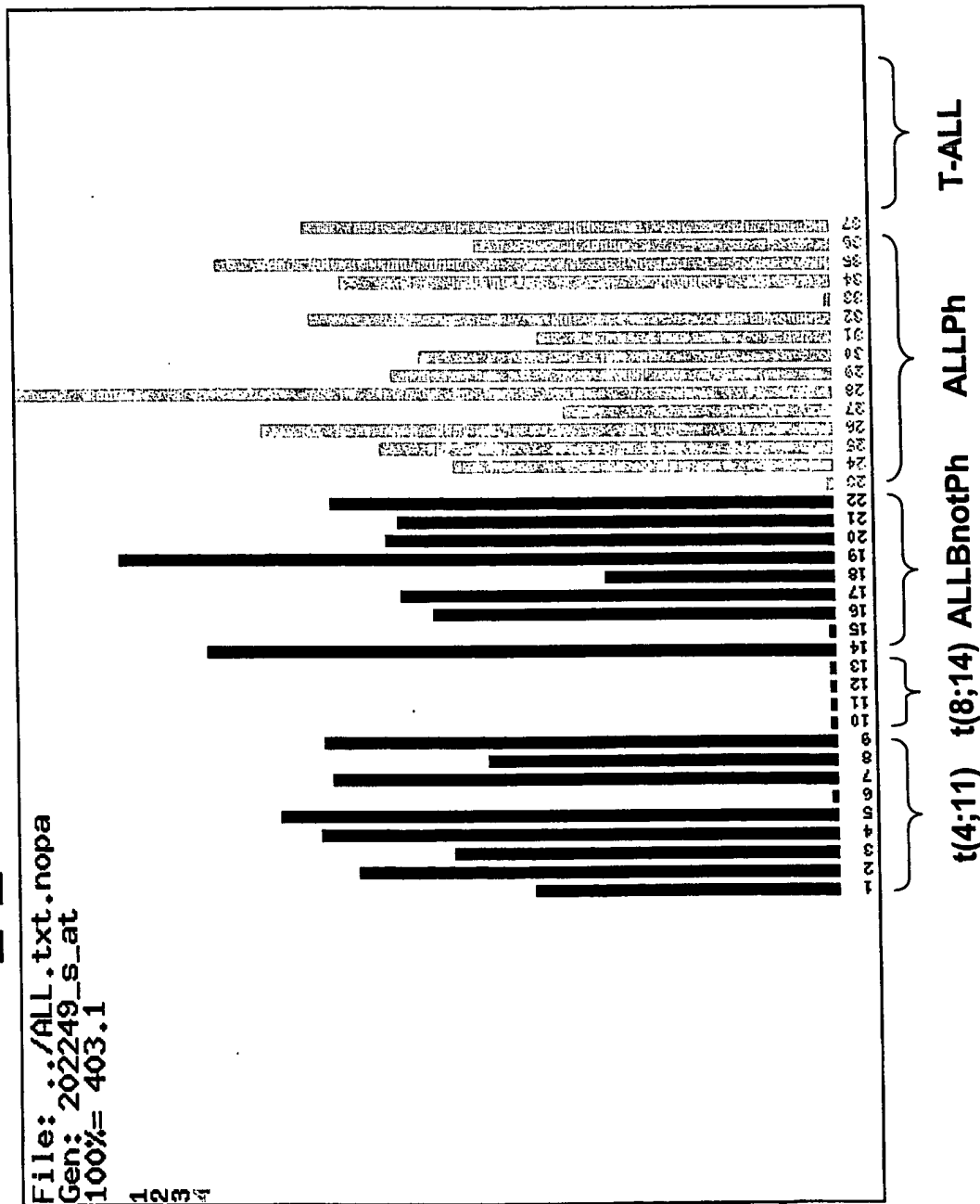


Figure 240

218836\_at, FLJ22638, ALL t(8;14) vs. all other

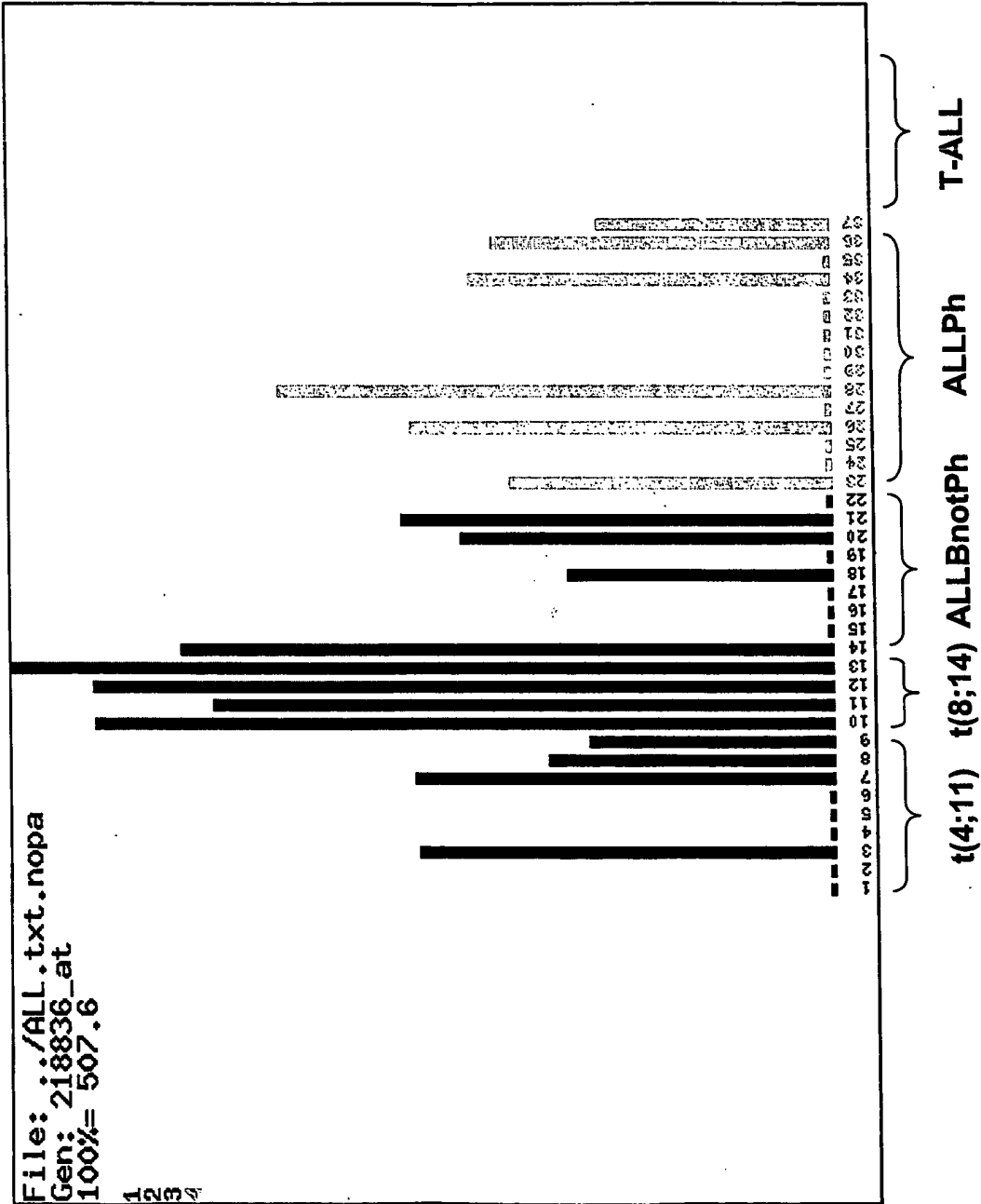
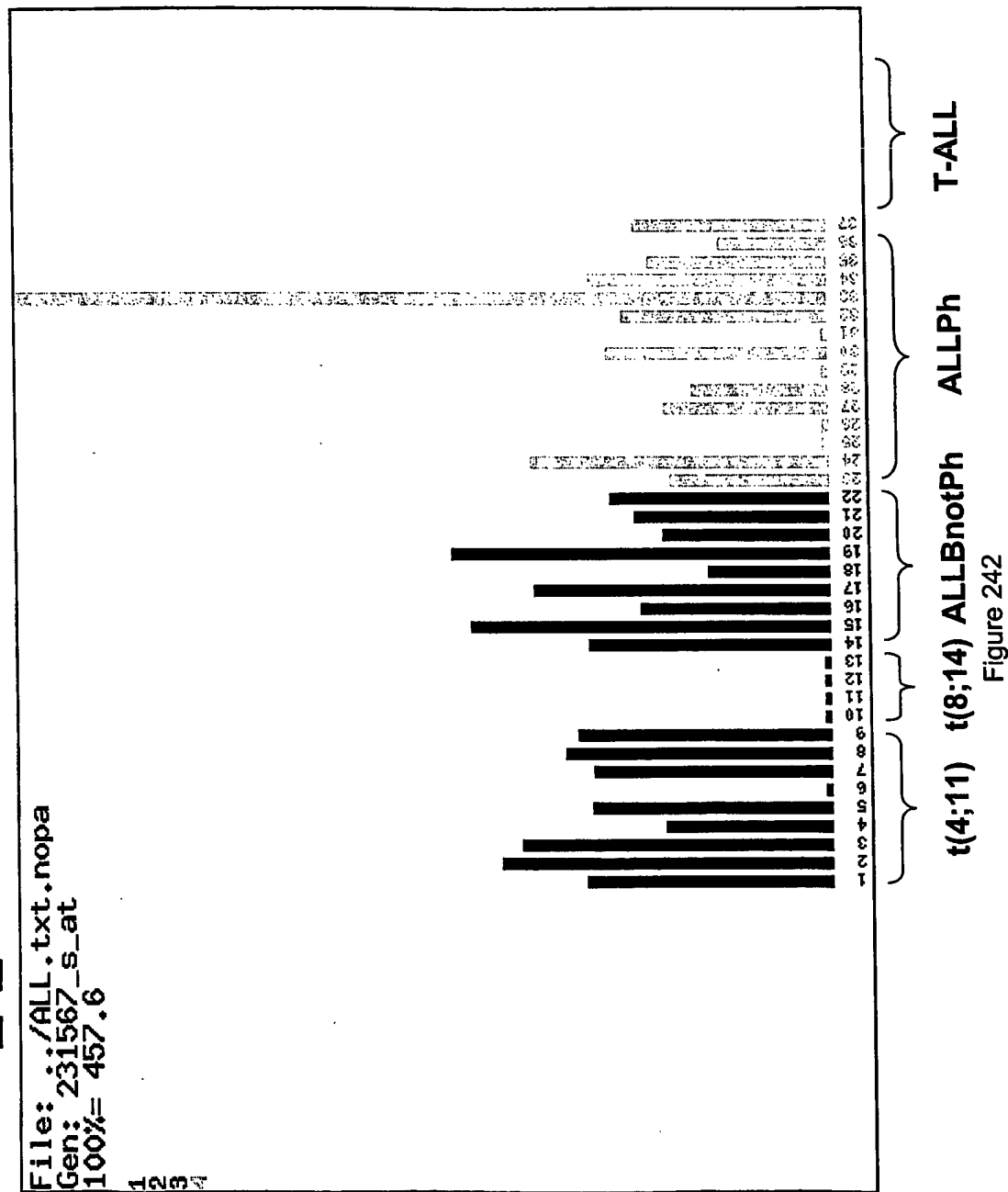


Figure 241

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231567\_s\_at, TSP-NY, ALL t(8;14) vs. ALL B not Ph





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# 204663\_at, ME3, ALL t(8;14) vs. ALL Ph

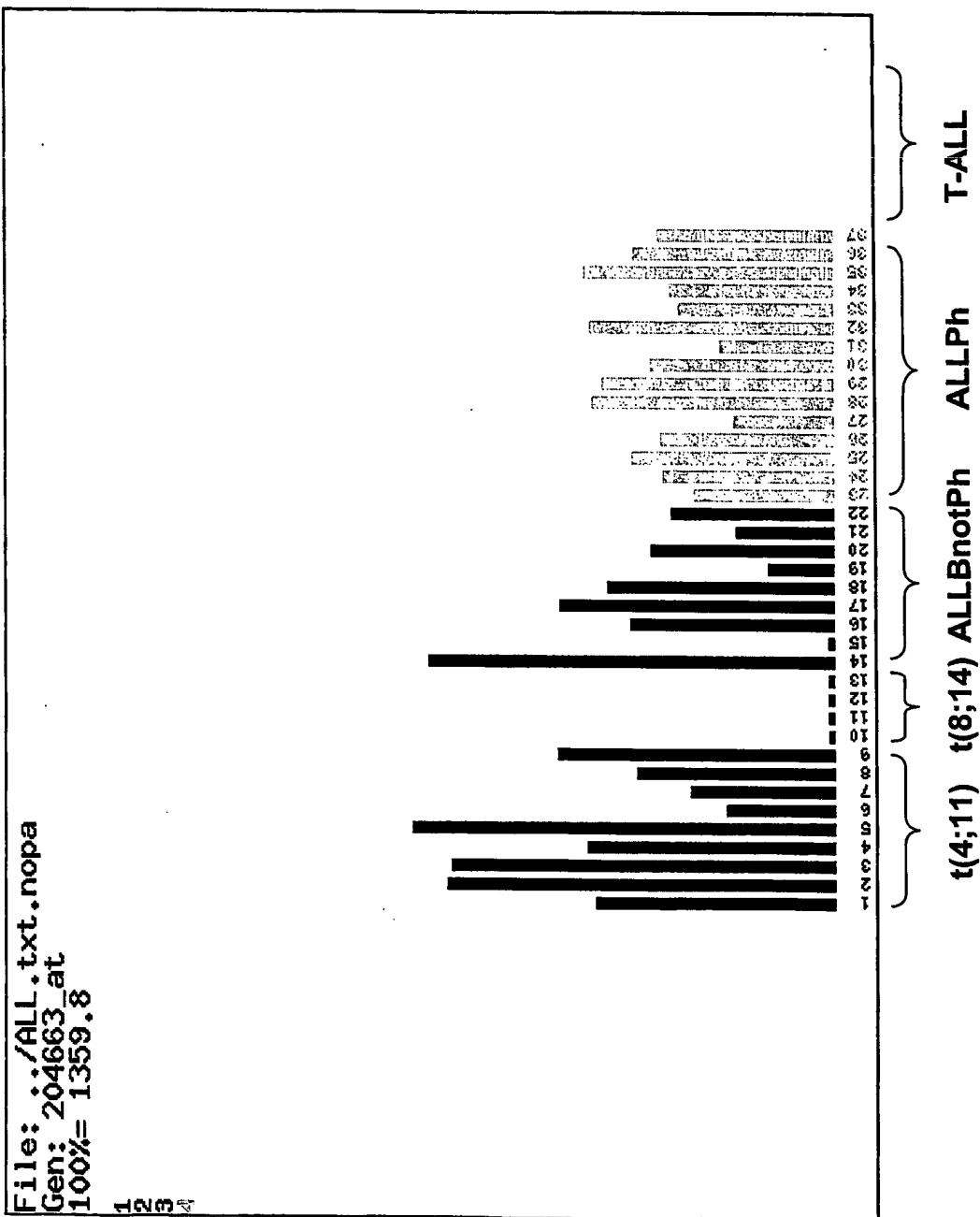
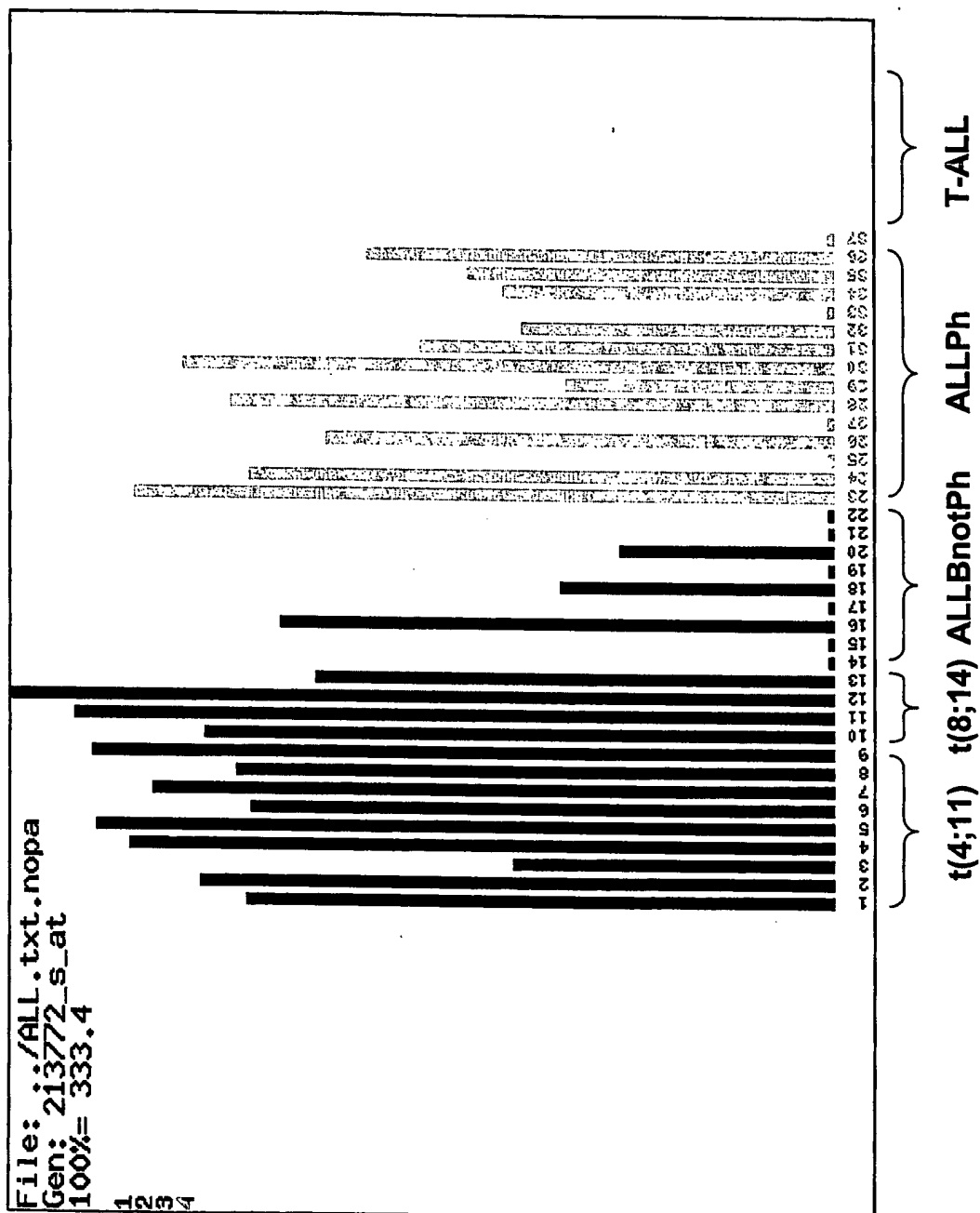


Figure 243

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213772\_s\_at, GGA2, ALL t(8;14) vs. T-ALL



**Figure 244**

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219358\_s\_at, CEN2A2, ALL B not Ph vs. all other

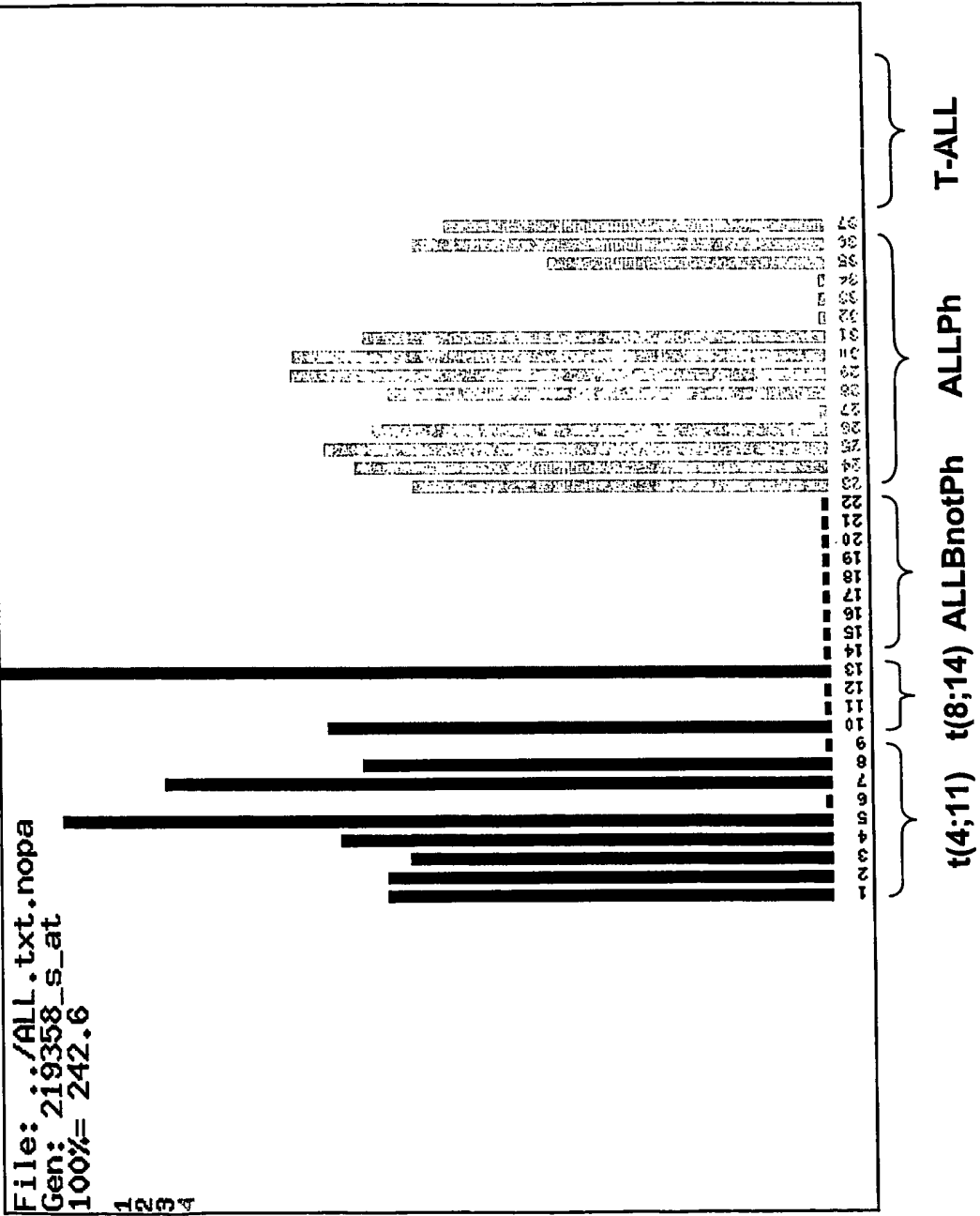
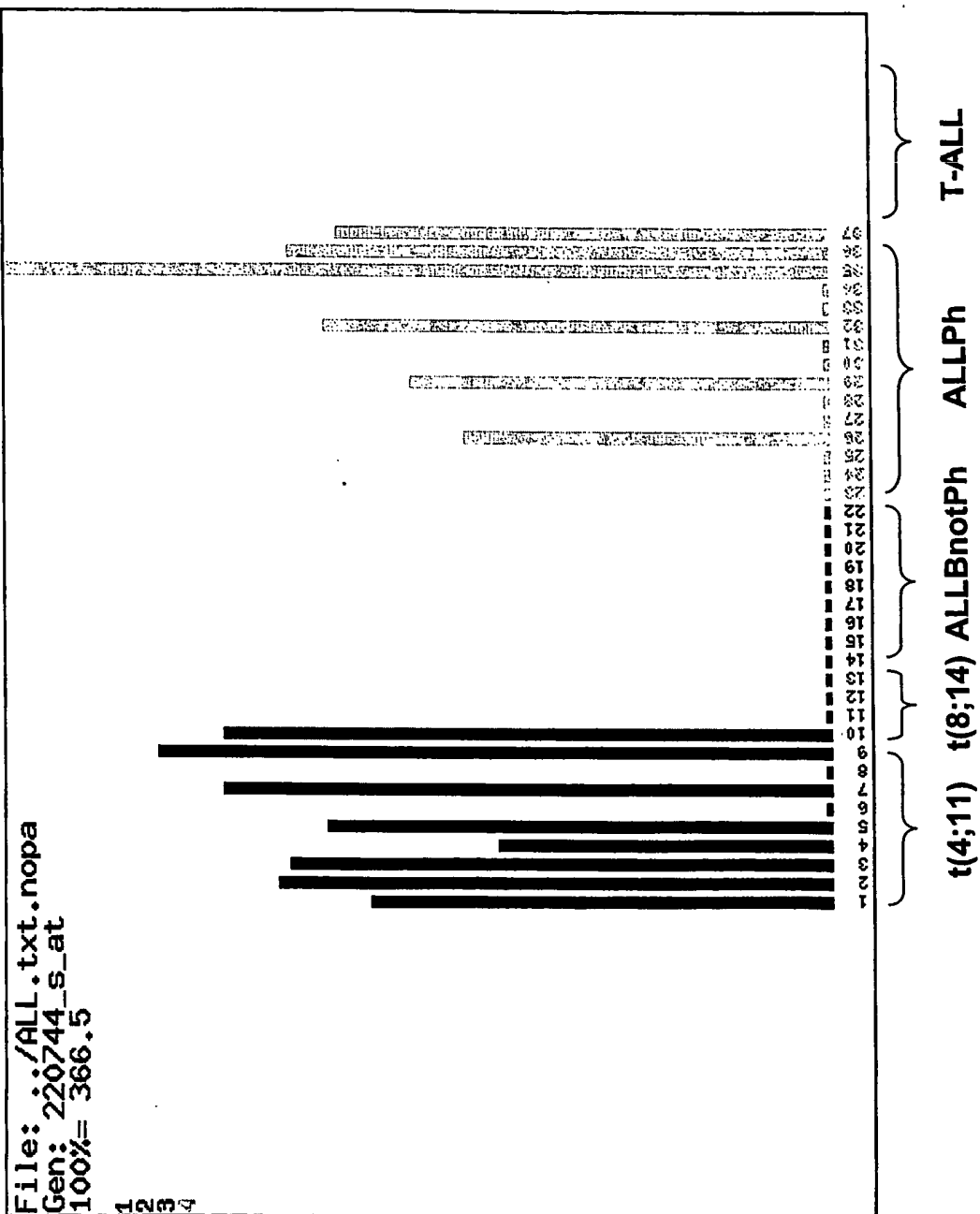


Figure 245

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220744\_s\_at, WDR10, ALL B not Ph vs. all other



**Figure 246**

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226646\_at, KLF2, ALL B not Ph vs. all other

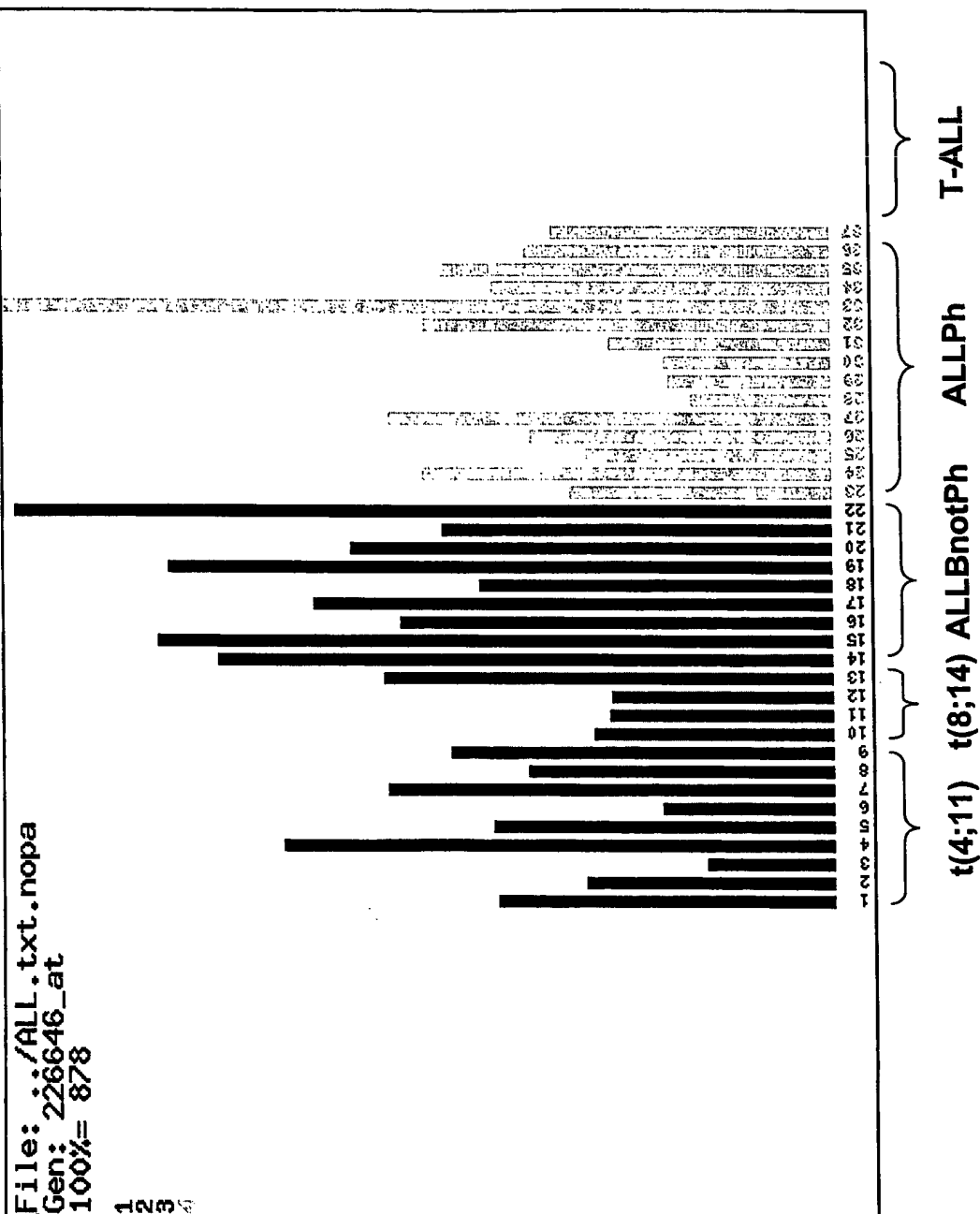


Figure 247

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# 202123\_s\_at, ABL1, ALL B not Ph vs. ALL Ph

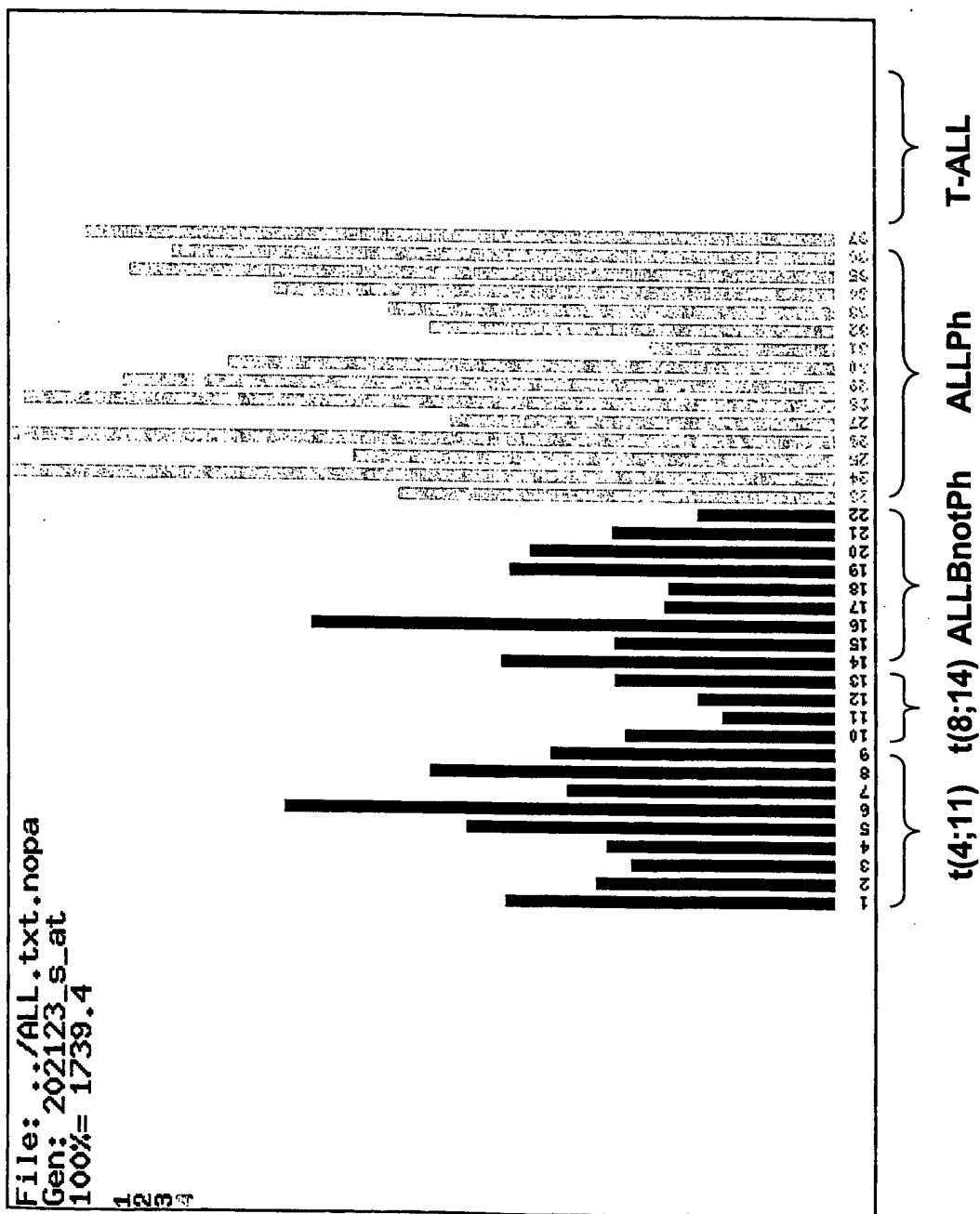


Figure 248

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# 242292\_at, ALL B not Ph vs. T-ALL

File: ../ALL.txt.nopa  
Gen: 242292\_at  
100%= 112.1

1234

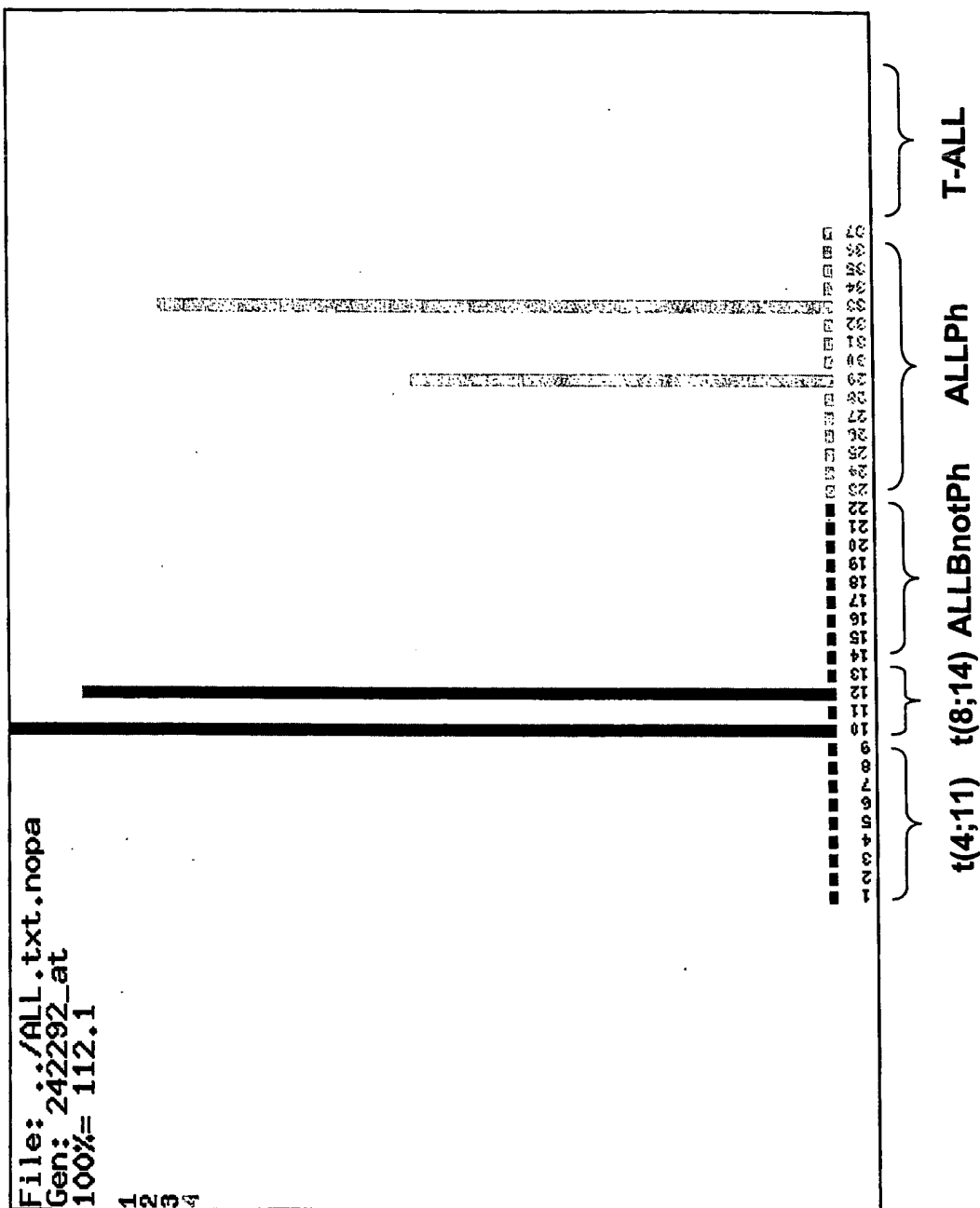


Figure 249

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# 224833\_at, ETS1, ALL Ph vs. all other

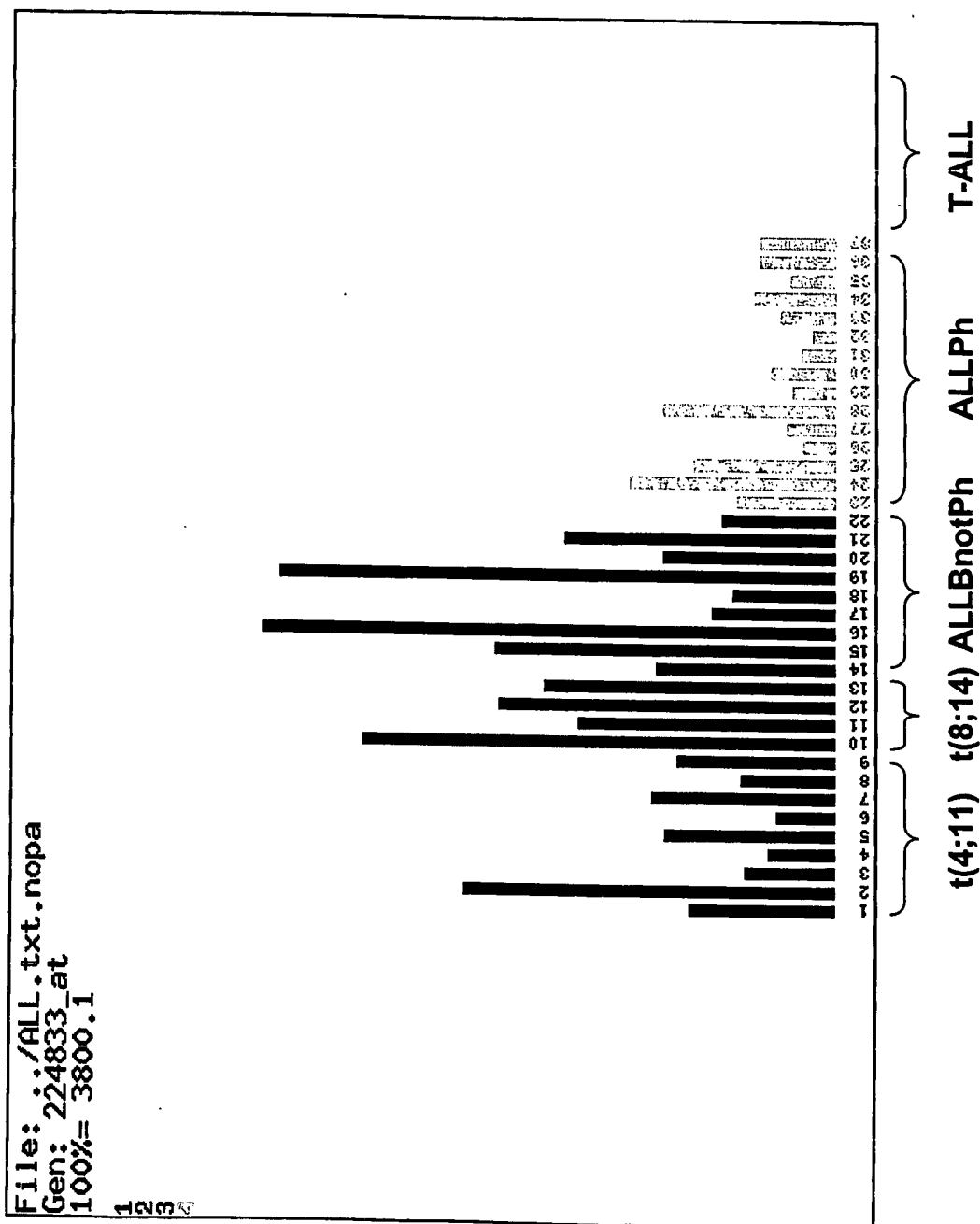
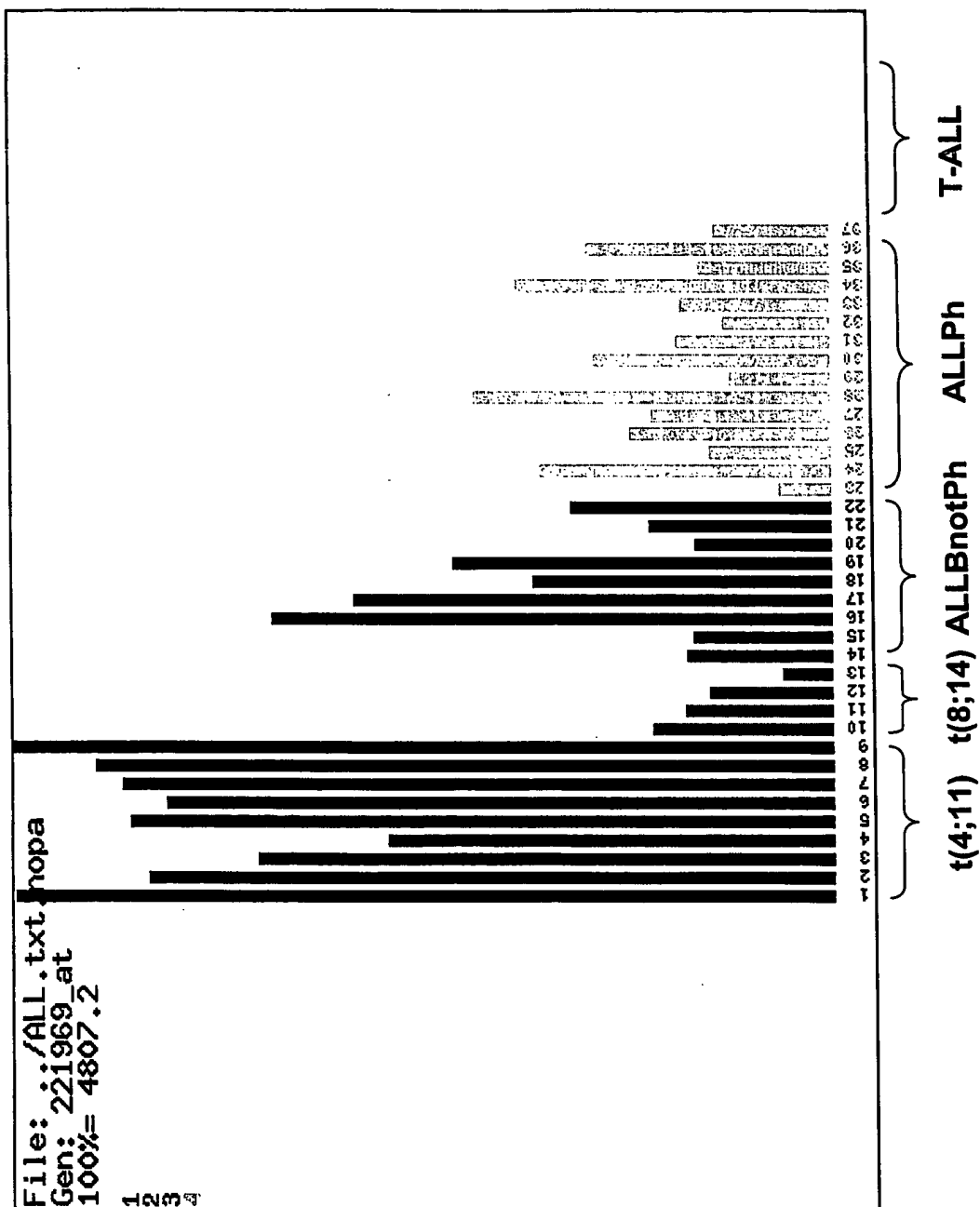


Figure 250

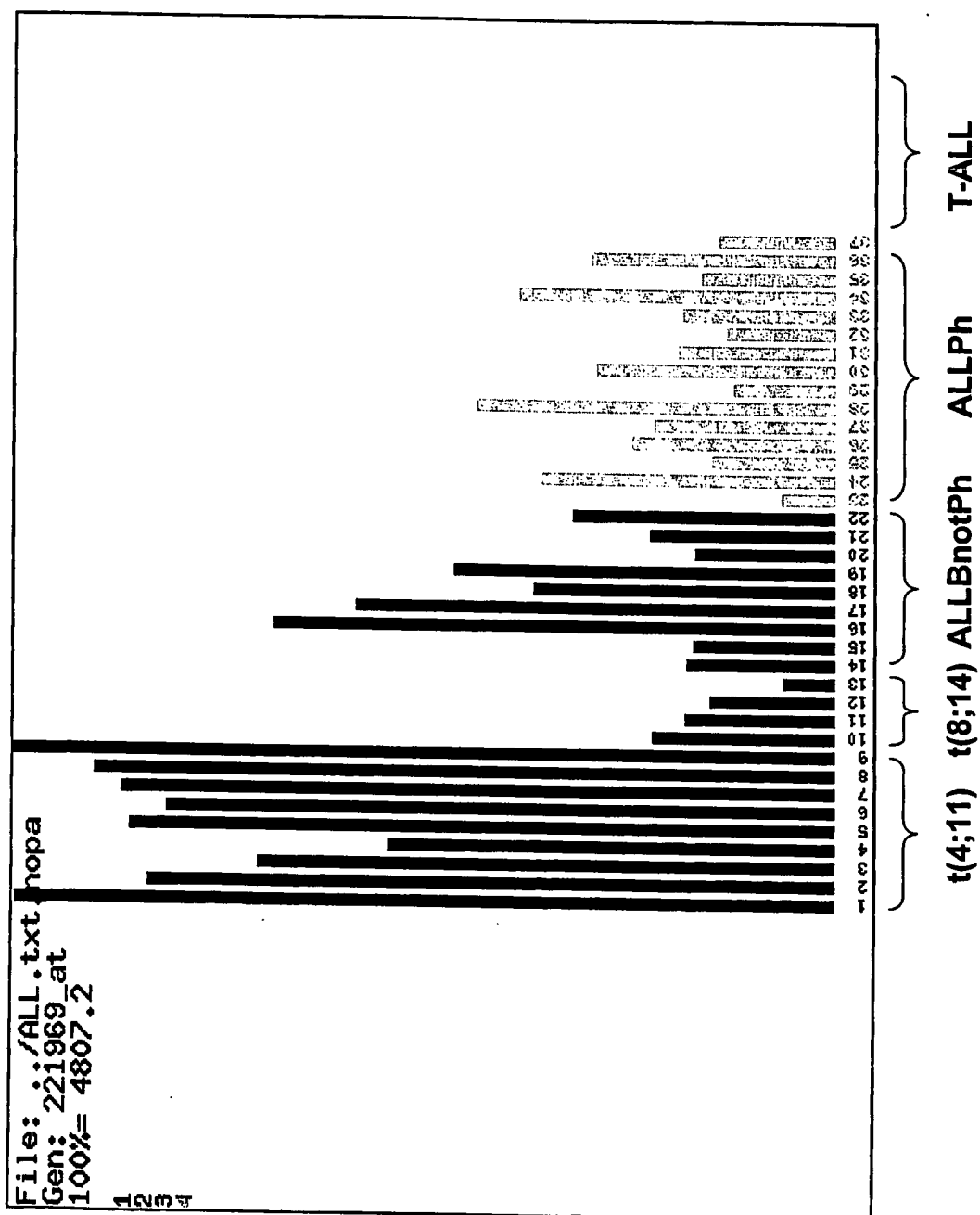


## 221969\_at, PAX5, ALL Ph vs. T-ALL



**Figure 251**

## 221969\_at, PAX5, T-ALL vs. all other



**Figure 252**

219033\_at, FLJ21308, ALL t(4;11) vs. all other

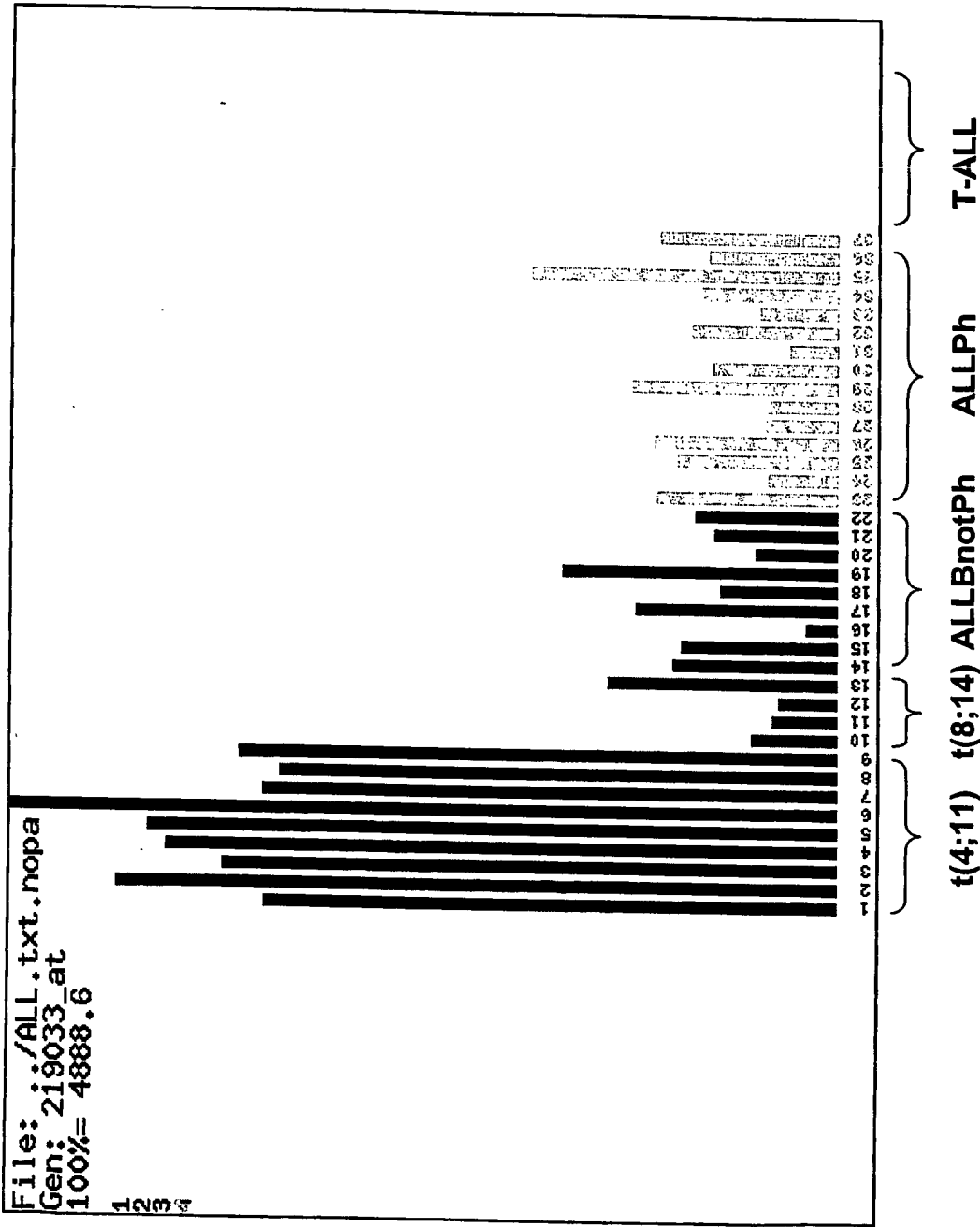


Figure 253

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# 210045\_at, IDH2, ALL t(4;11) vs. ALL t(8;14)

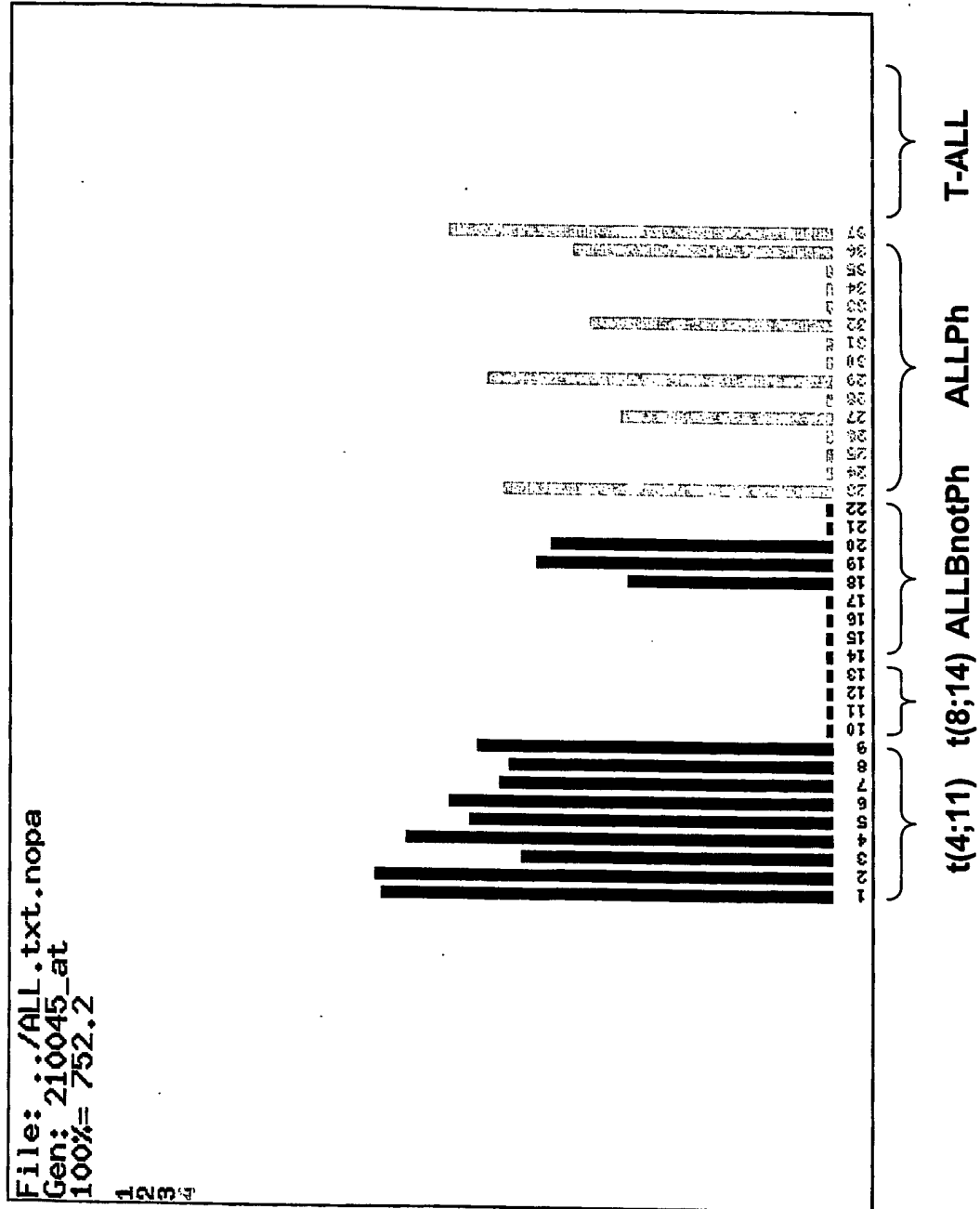


Figure 254

237431\_at, ALL t(4;11) vs. ALL B not Ph

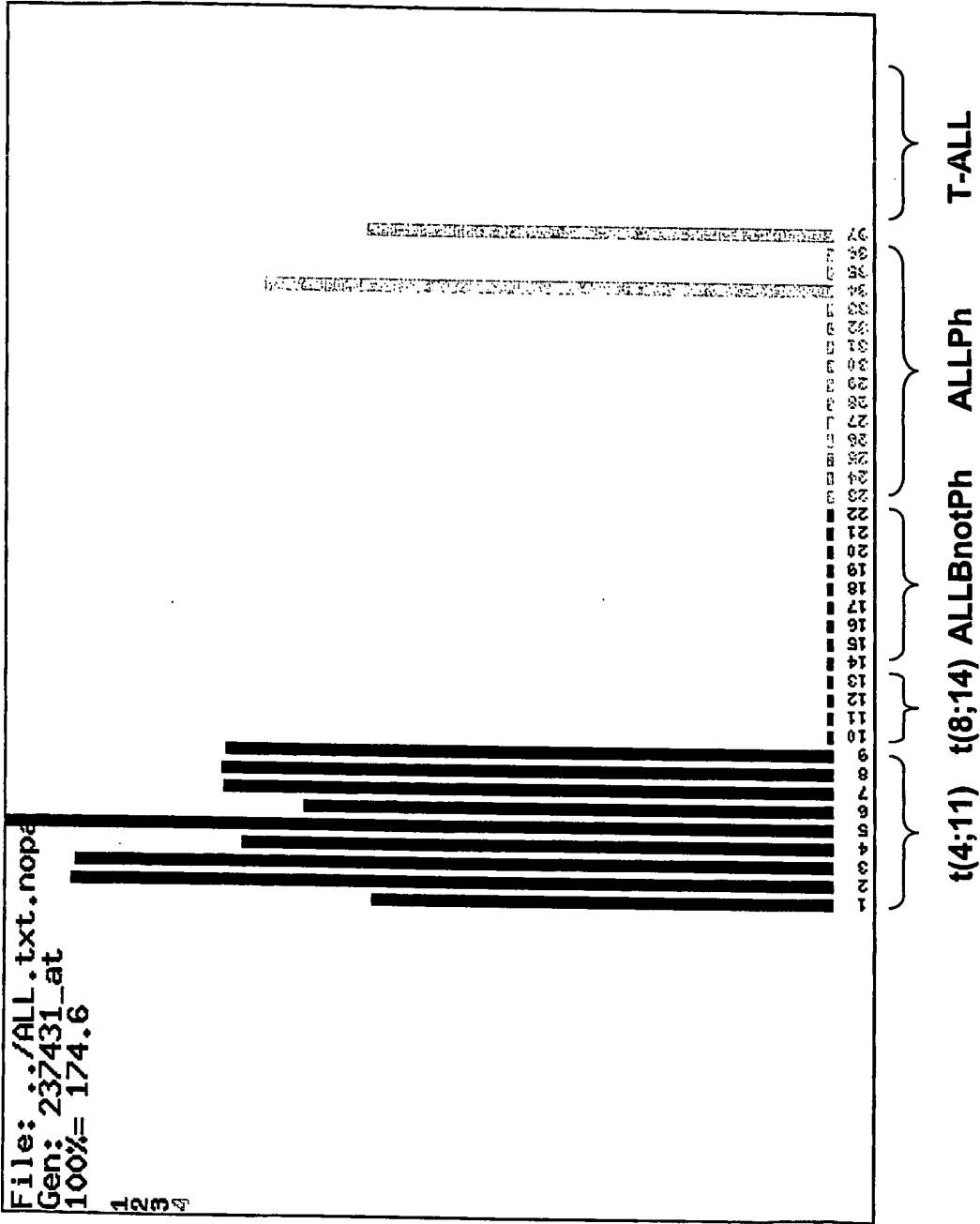


Figure 255

# 204069\_at, MEIS1, ALL t(4;11) vs. ALL Ph

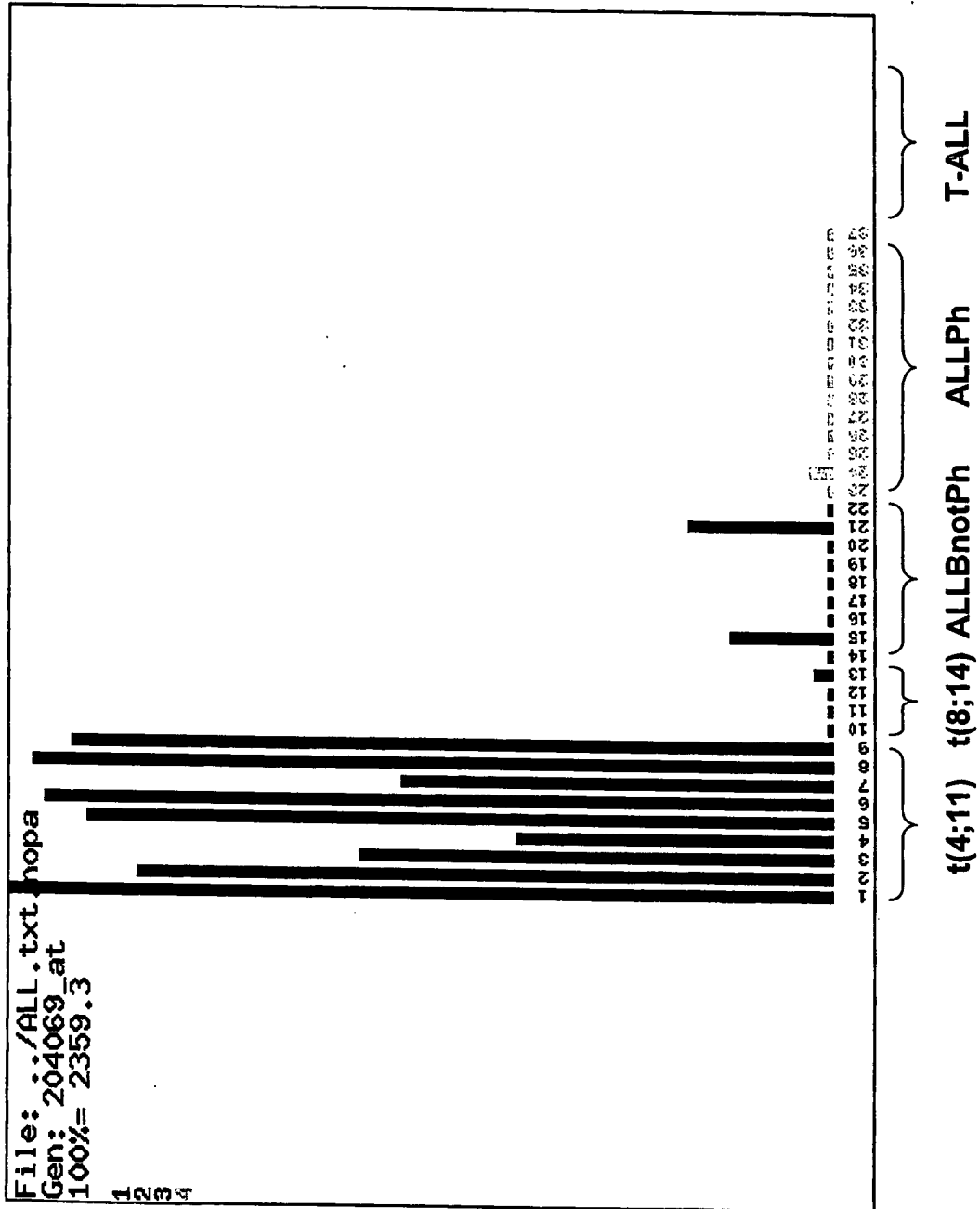


Figure 256

# 221969\_at, PAX5, ALL t(4;11) vs. T-ALL

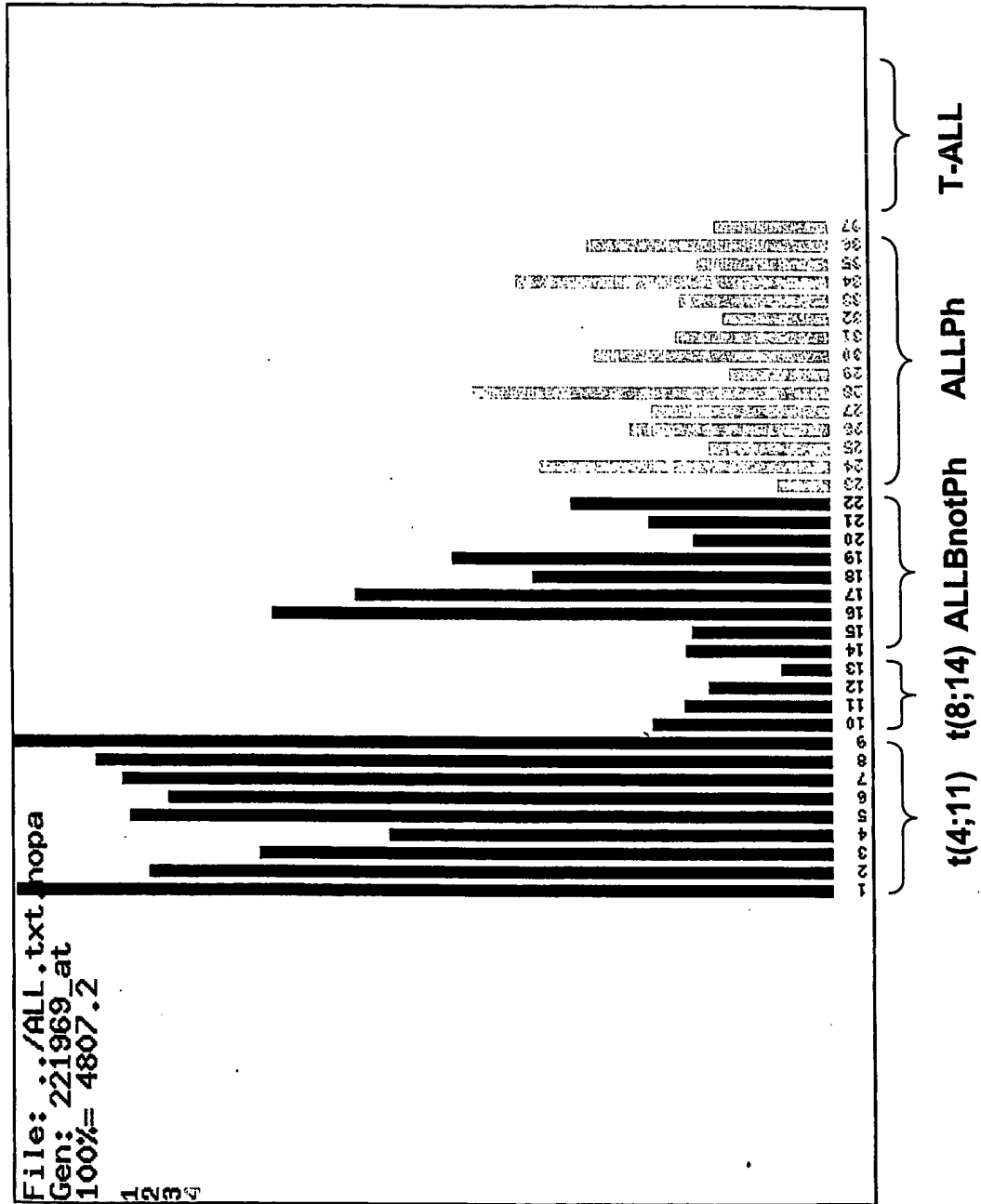


Figure 257

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# 228211\_at, ALL t(8;14) vs. all other

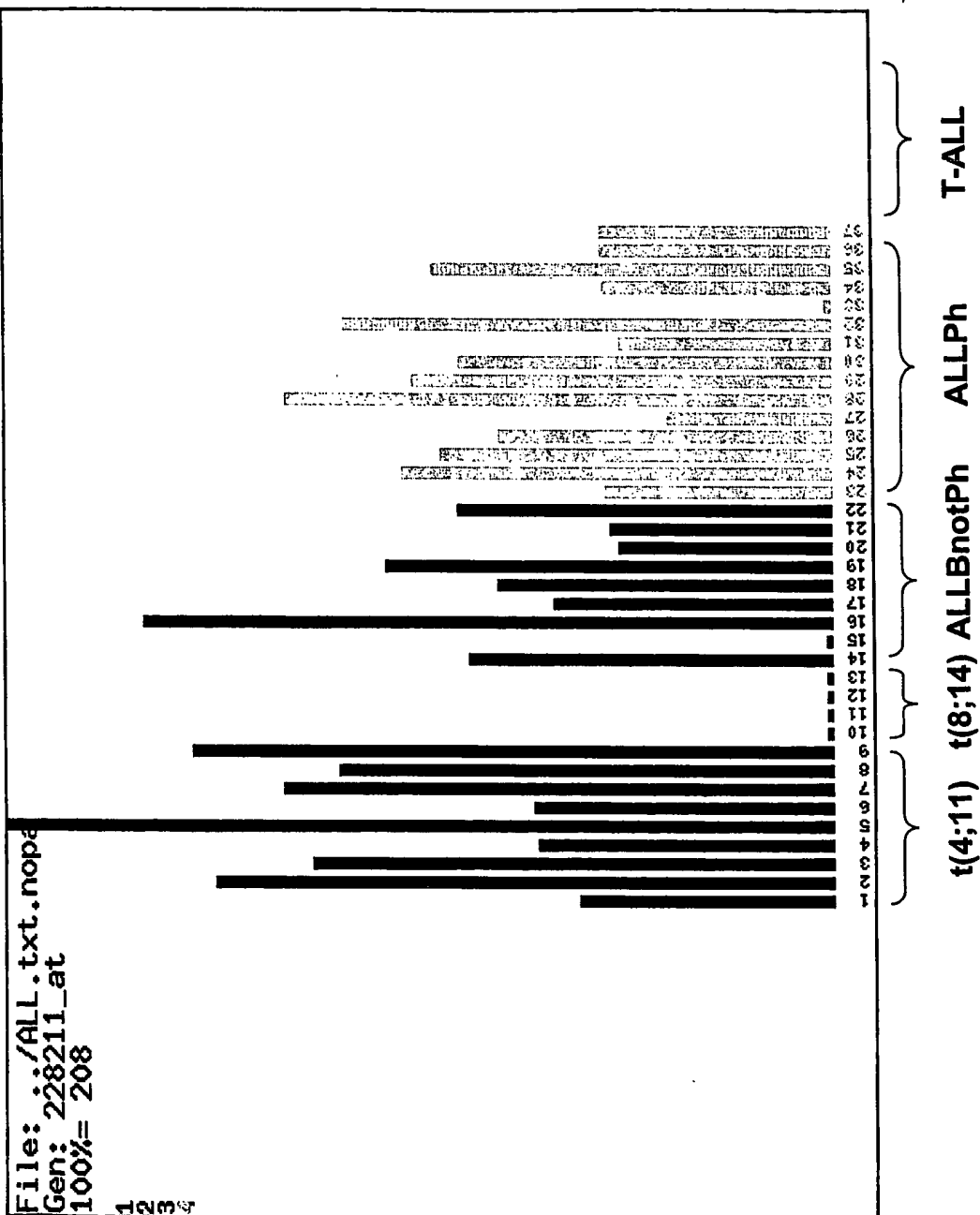


Figure 258



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202249\_s\_at, H326, ALL t(8;14) vs. all other

File: ../ALL.txt.nopa  
Gen: 202249\_s\_at  
100%= 403.1

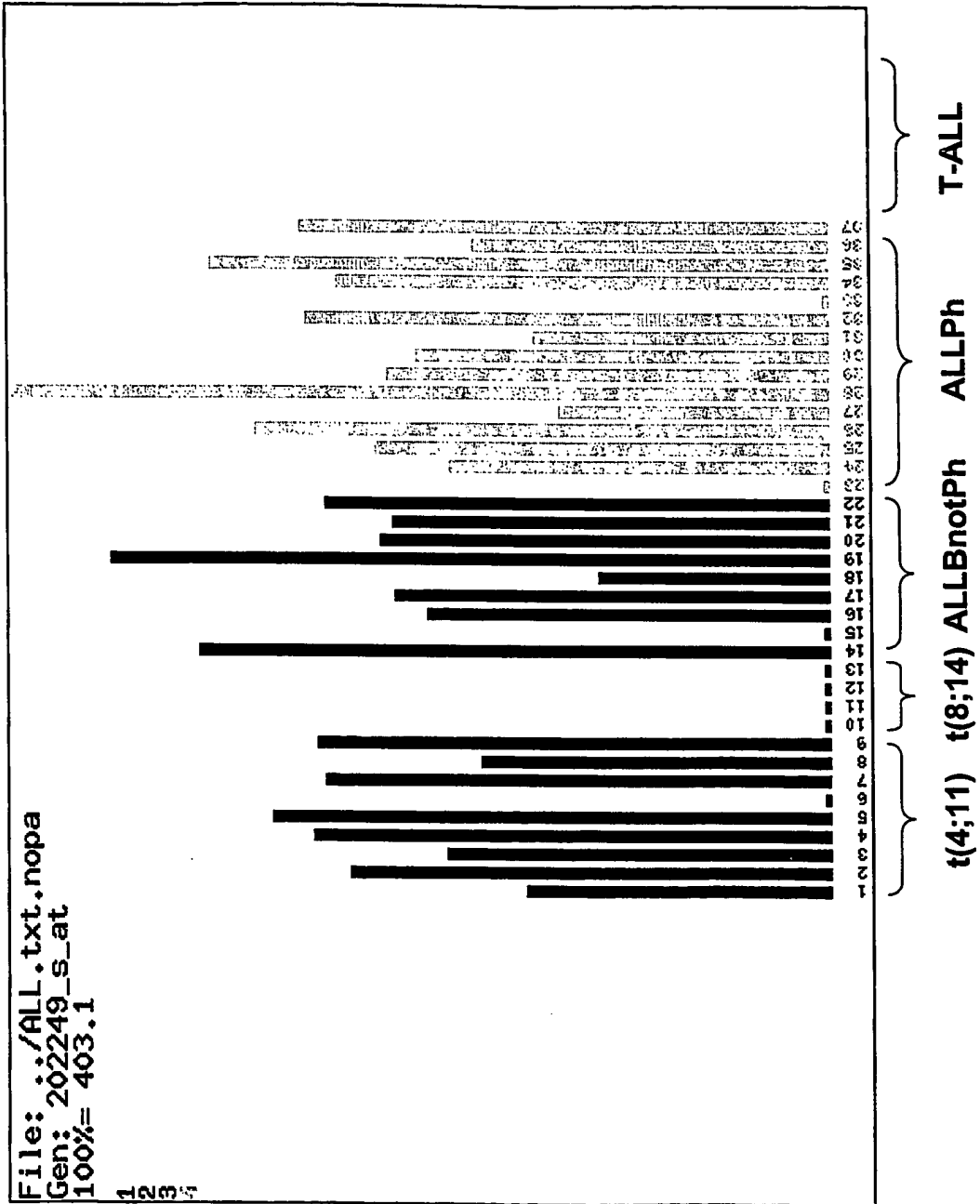


Figure 259

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# 218836\_at, FLJ22638, ALL t(8;14) vs. all other

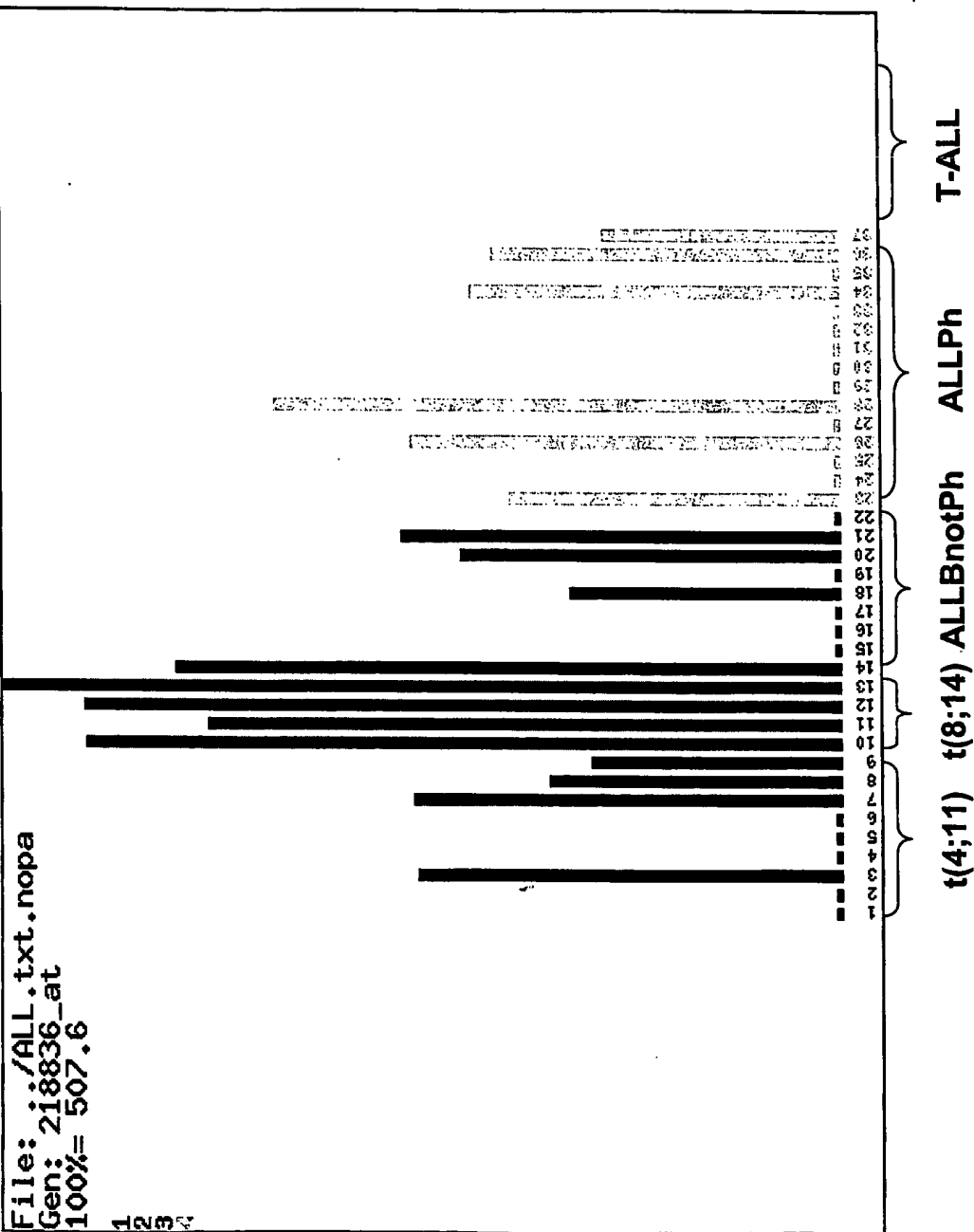


Figure 260

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231567\_s\_at, TSP-NY, ALL t(8;14) vs. ALL B not Ph

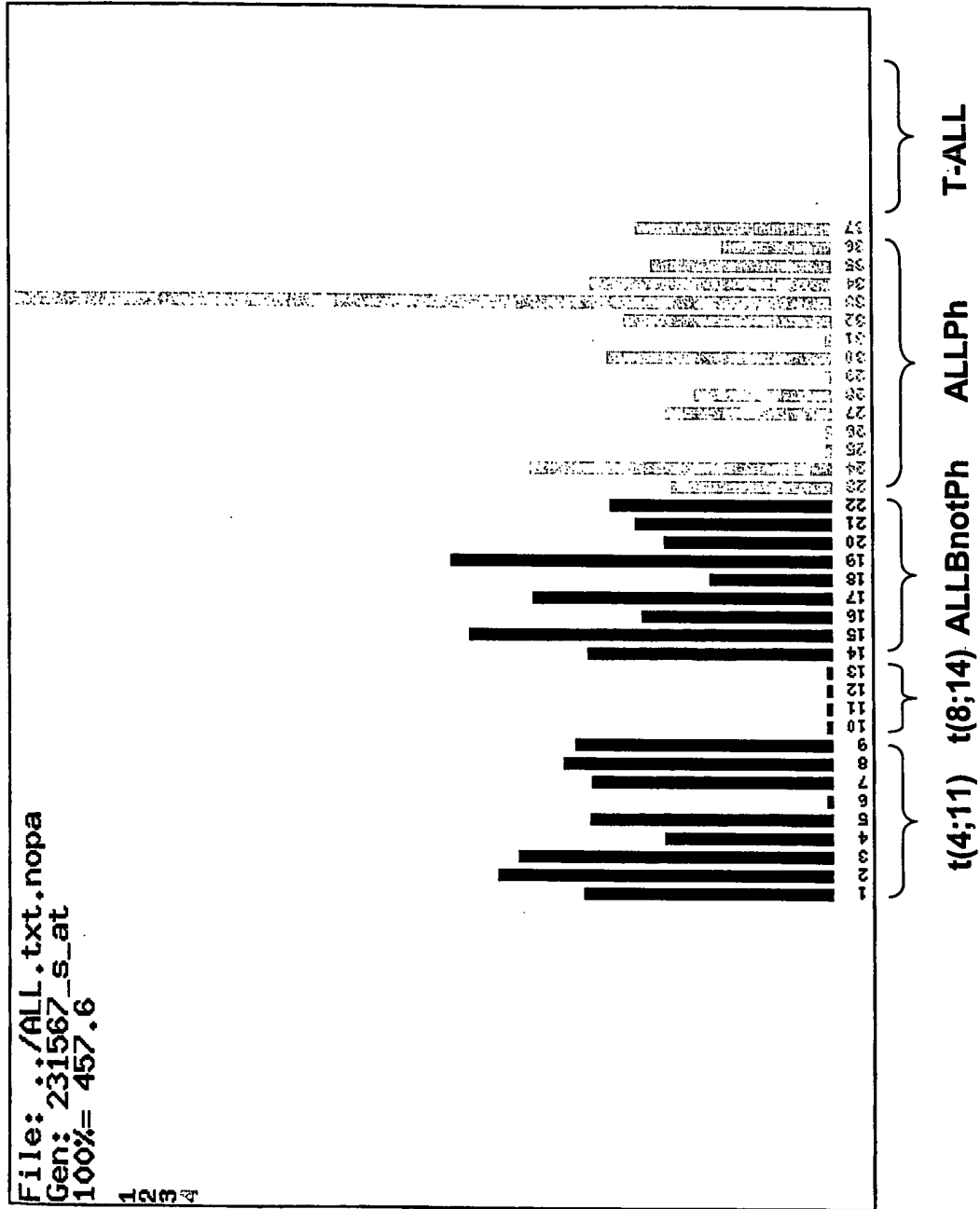


Figure 261

# 204663\_at, ME3, ALL t(8;14) vs. ALL Ph

File: ../ALL.txt.nopa  
Gen: 204663\_at  
100%= 1359.8

1 2 3 4

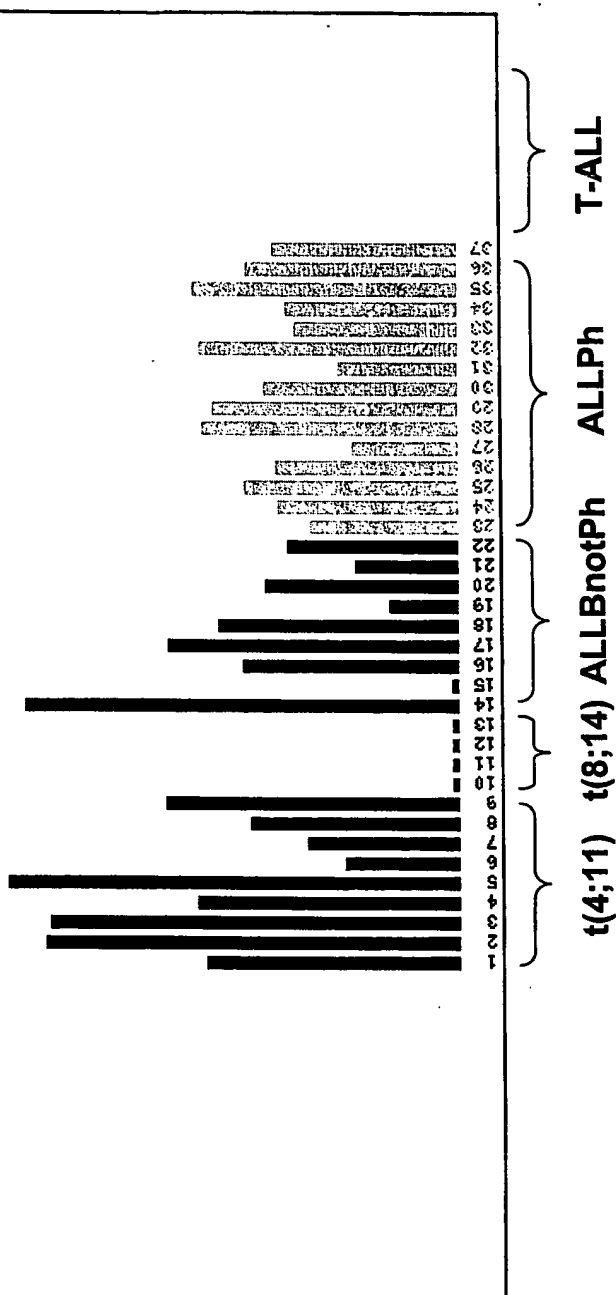


Figure 262

# 213772\_s\_at, GGA2, ALL t(8;14) vs. T-ALL

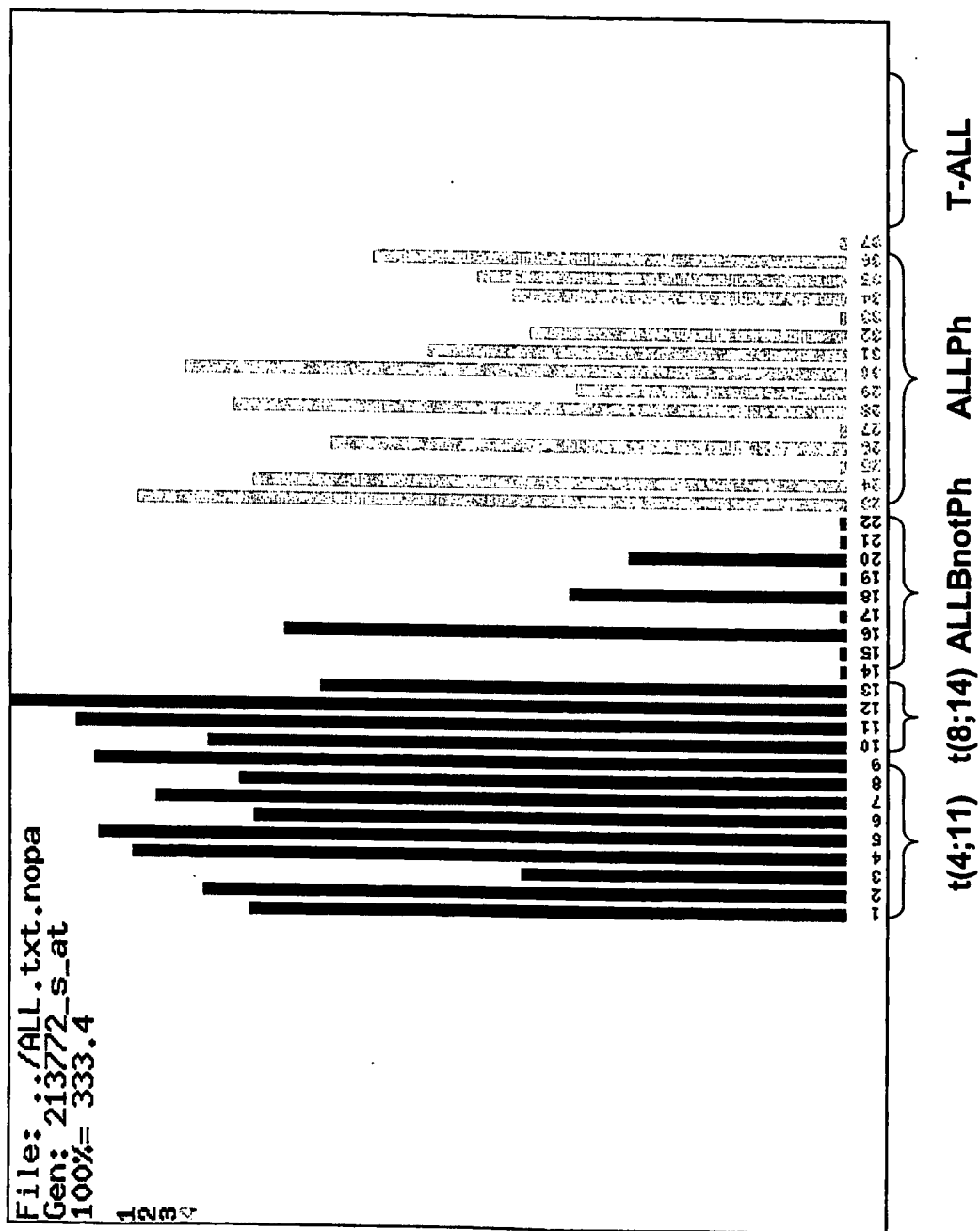


Figure 263

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219358\_s\_at, CEN2A2, ALL B not Ph vs. all other

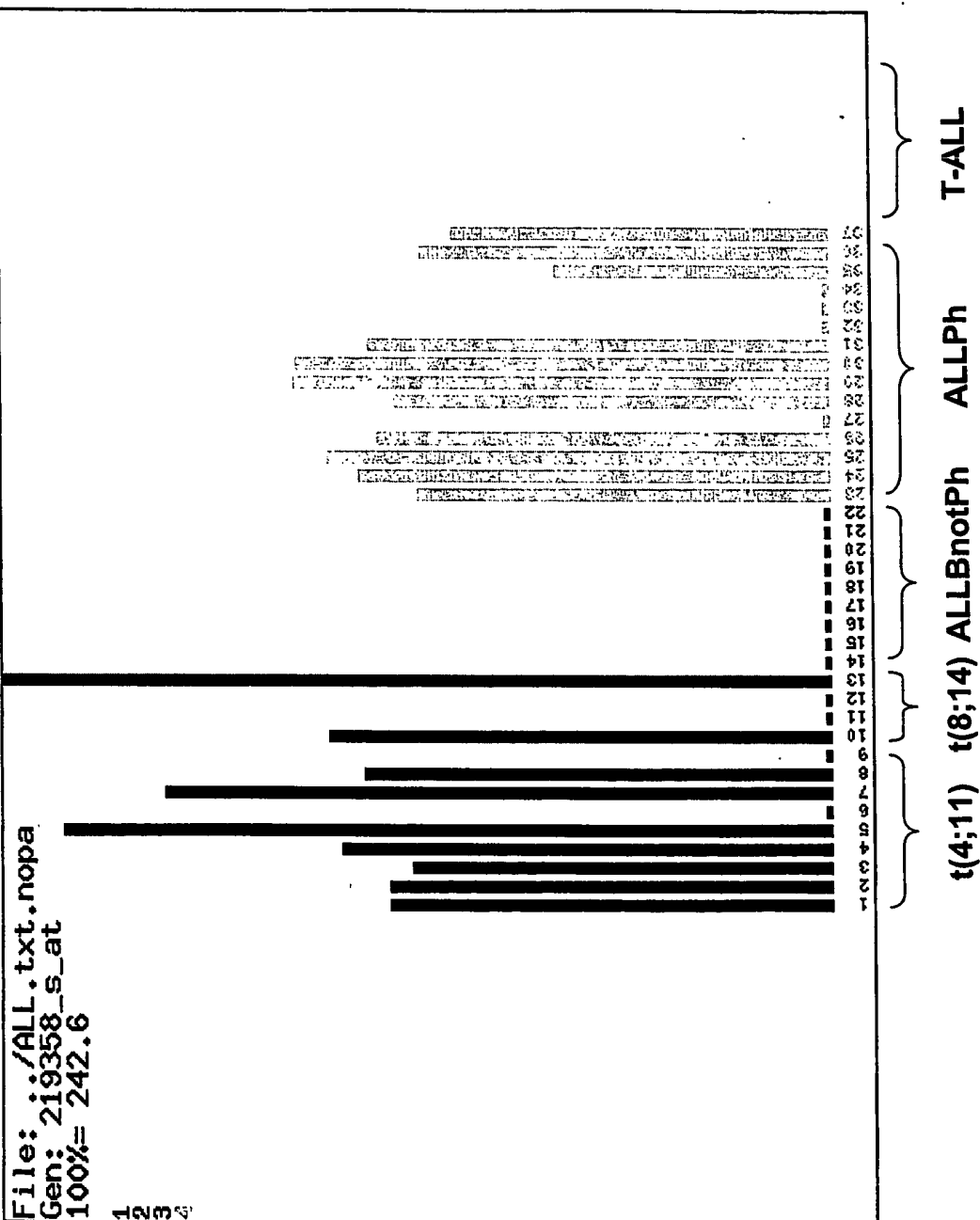


Figure 264

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220744\_s\_at, WDR10, ALL B not Ph vs. all other

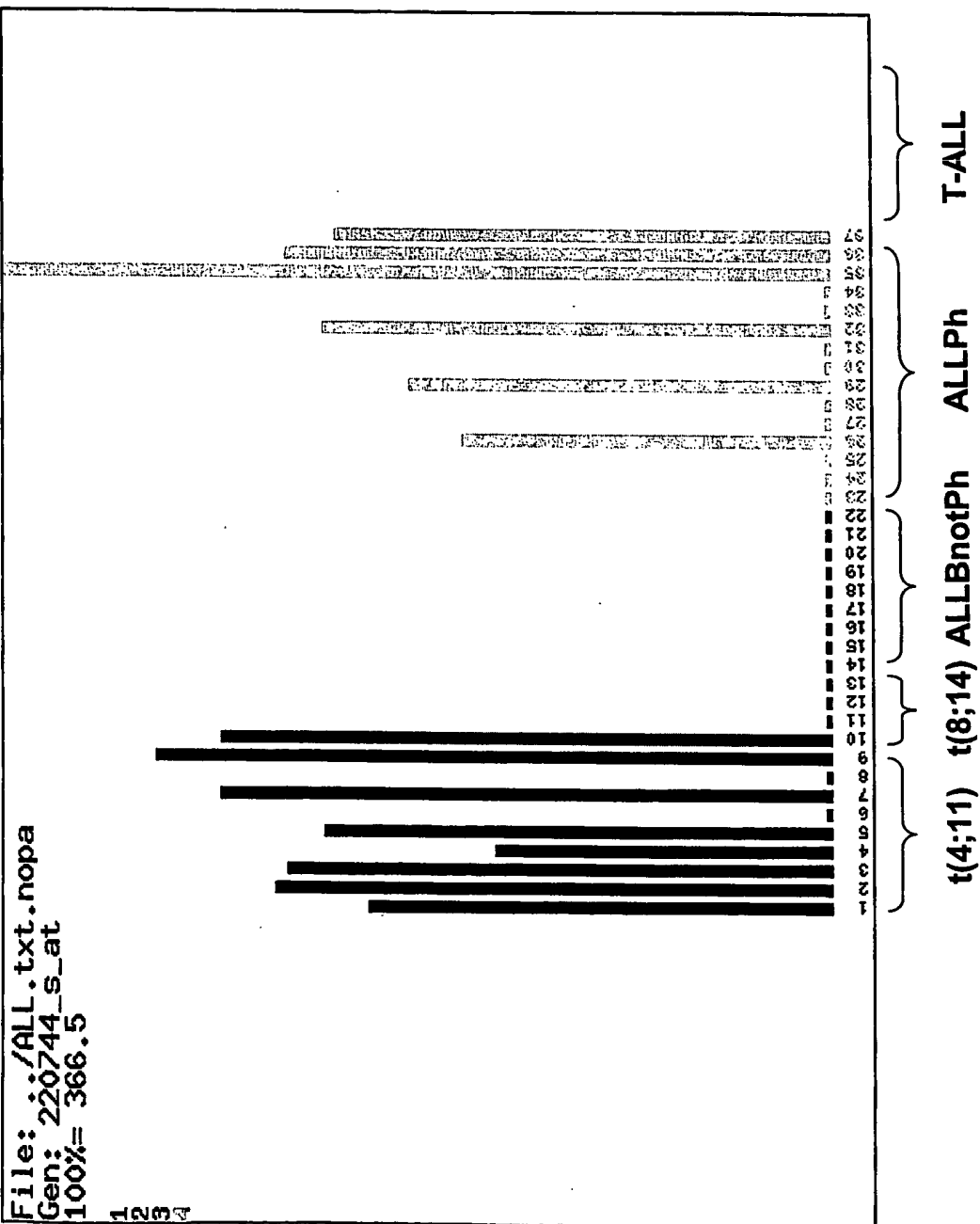


Figure 265

# 226646\_at, KLF2, ALL B not Ph vs. all other

File: ./ALL.txt.nopa  
Gen: 226646\_at  
100%= 878

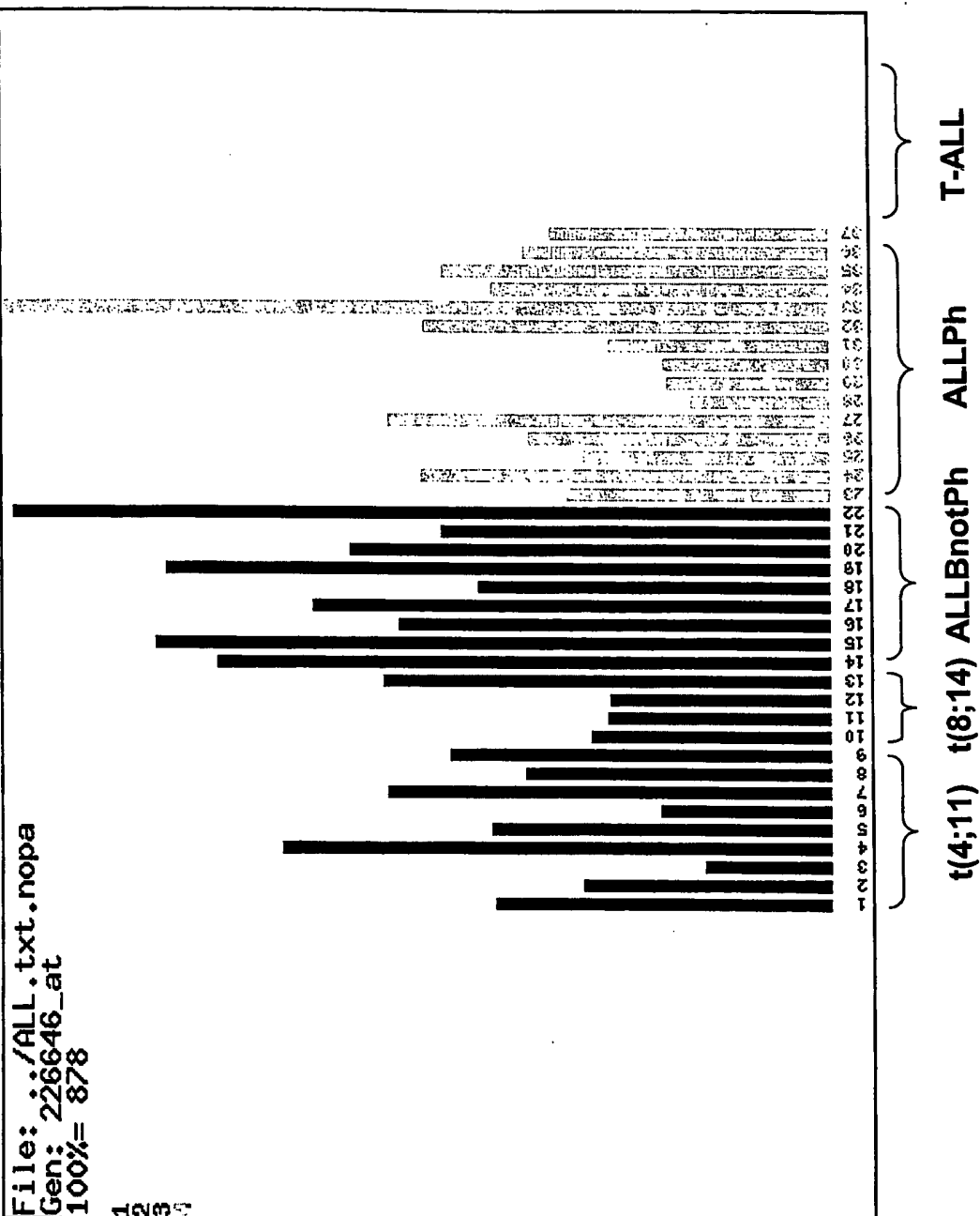


Figure 266



# 202123\_s\_at, ABL1, ALL B not Ph vs. ALL Ph

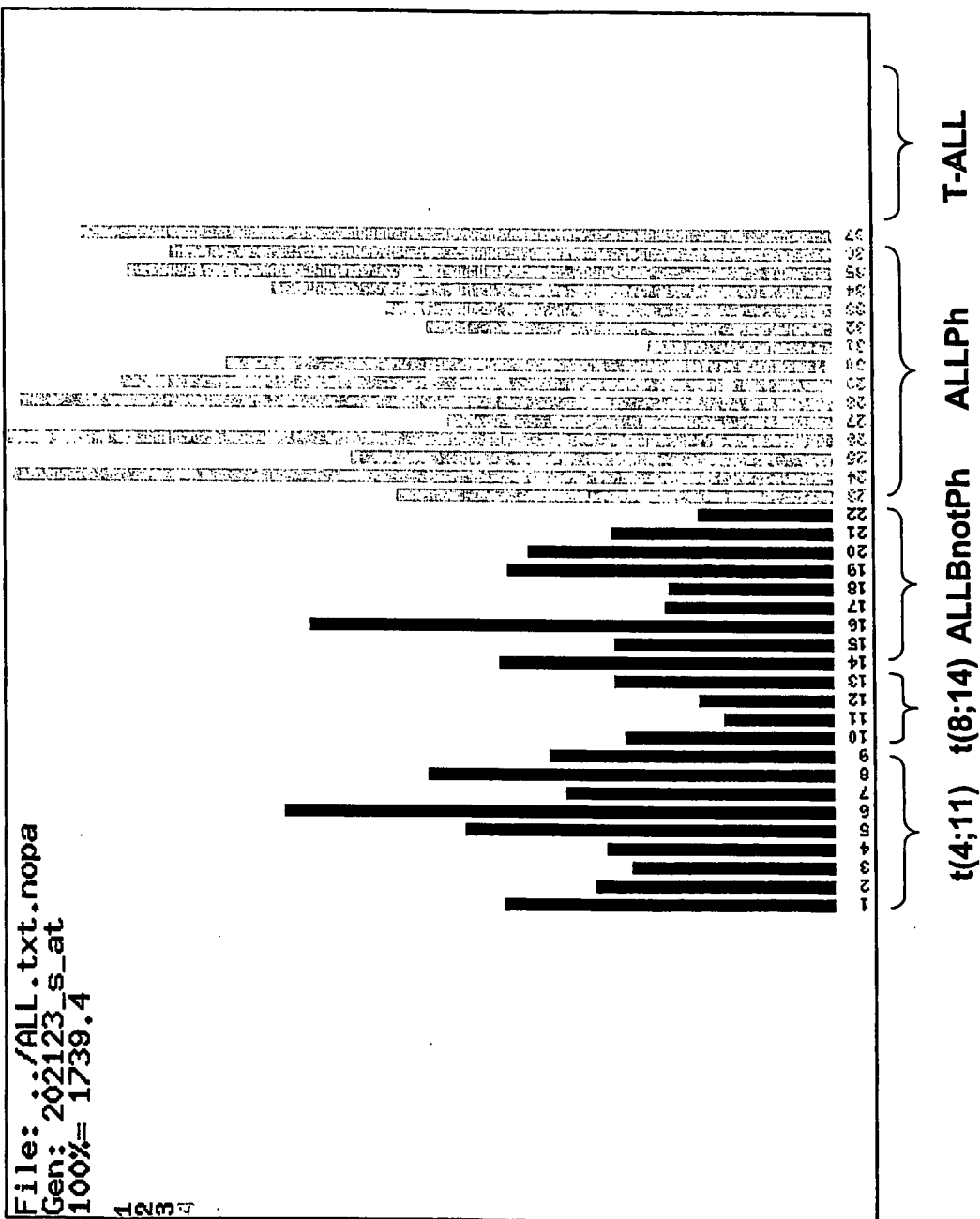


Figure 267

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# 242292\_at, ALL B not Ph vs. T-ALL

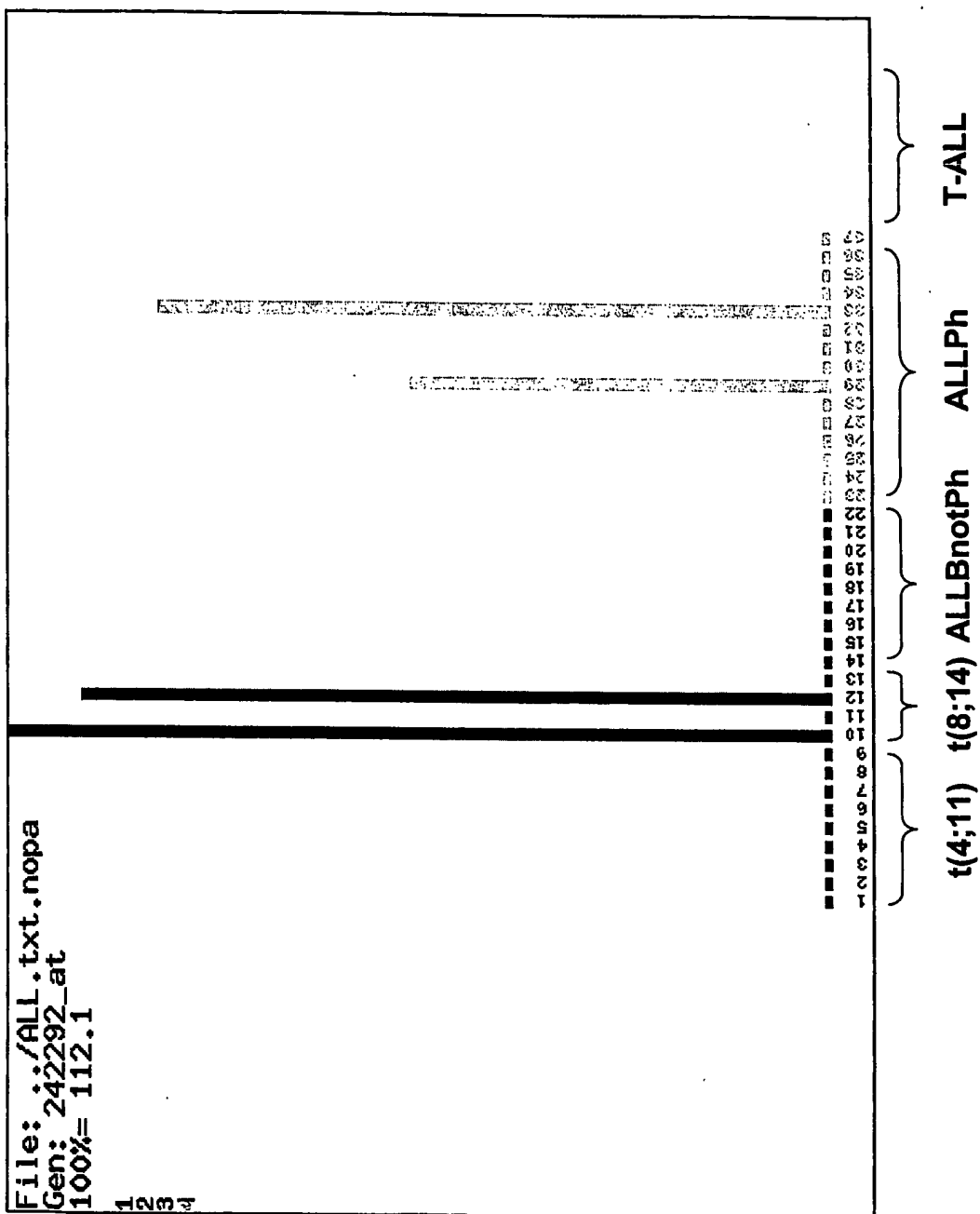


Figure 268

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# 224833\_at, ETS1, ALL Ph vs. all other

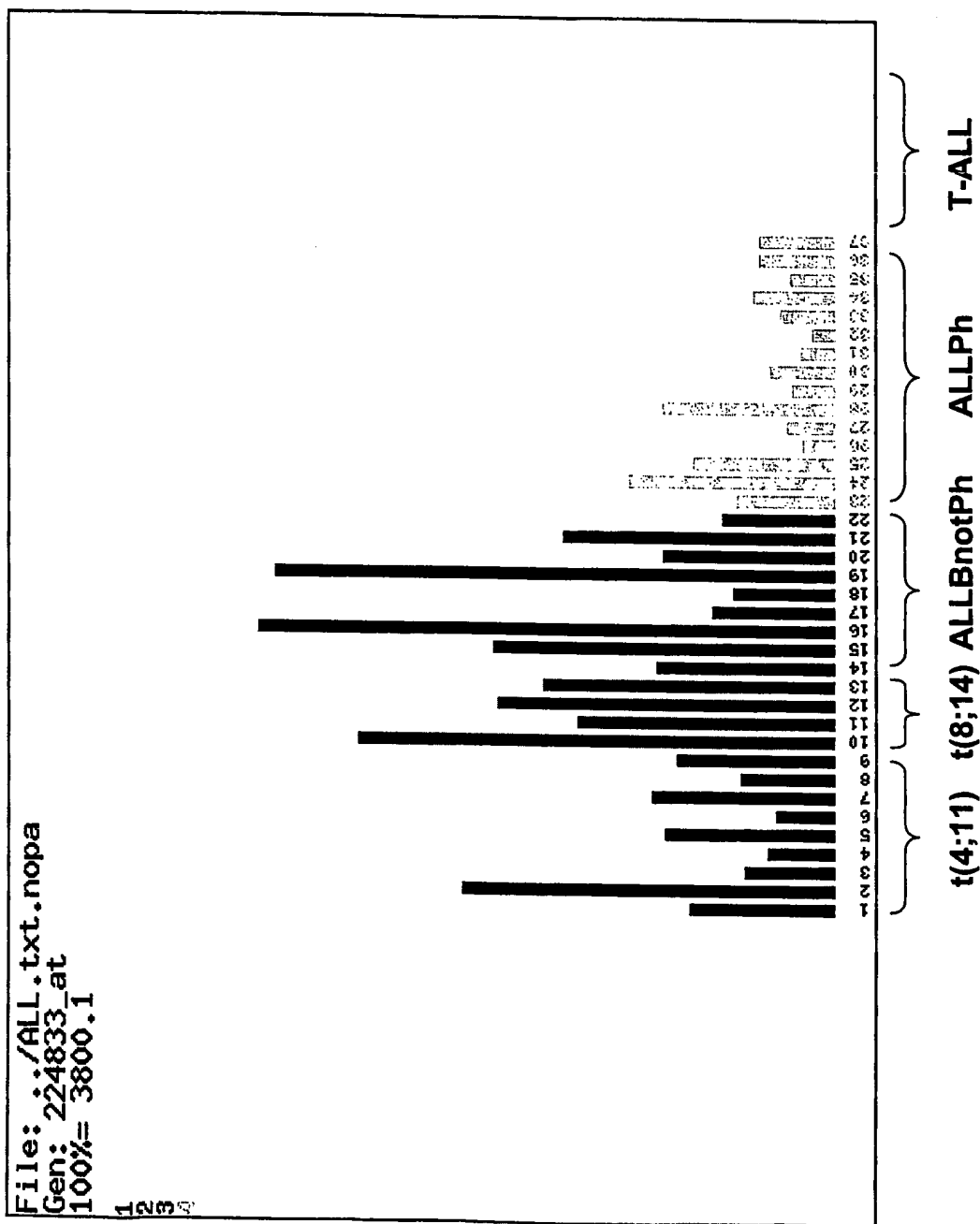


Figure 269

# 221969\_at, PAX5, ALL Ph vs. T-ALL

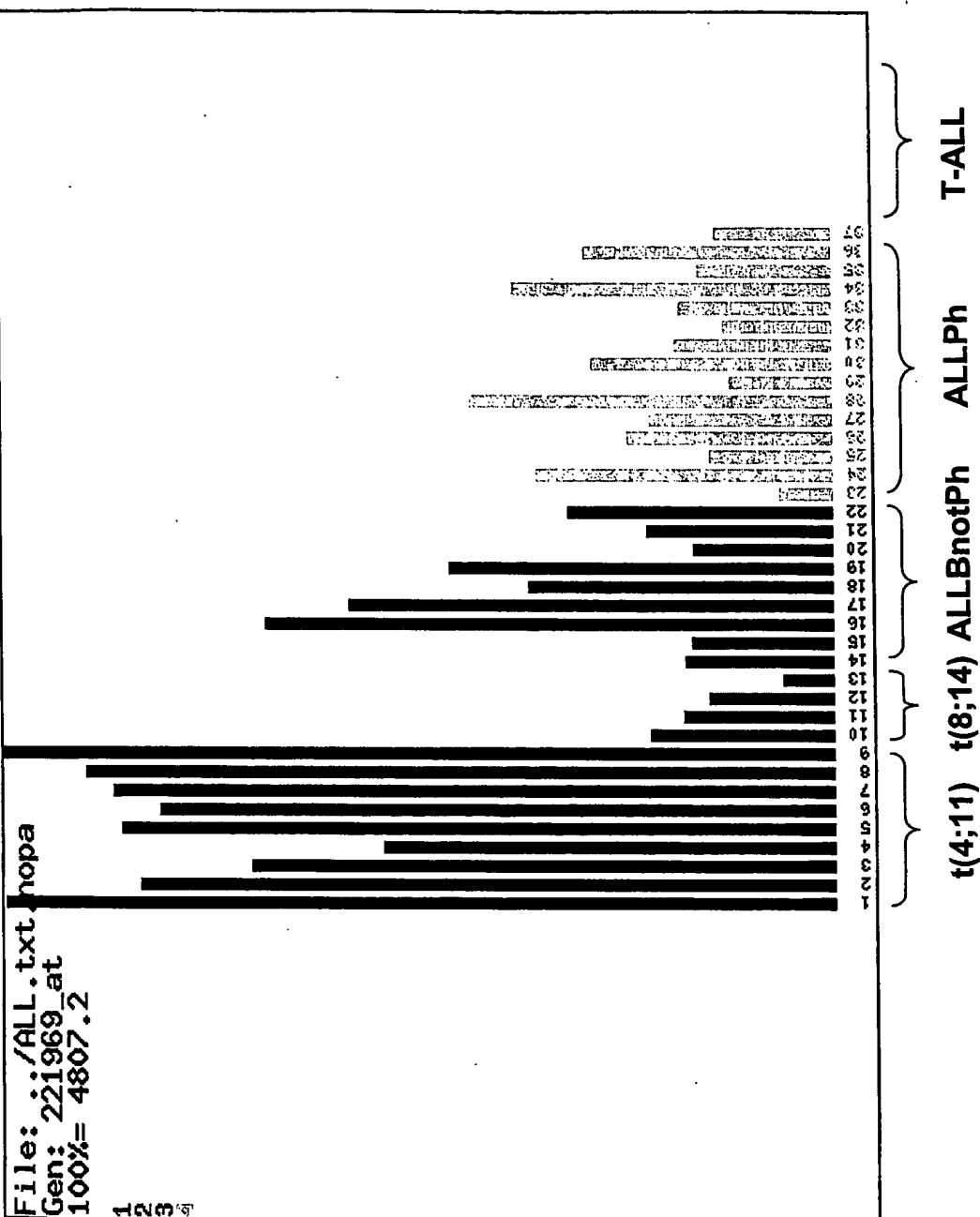
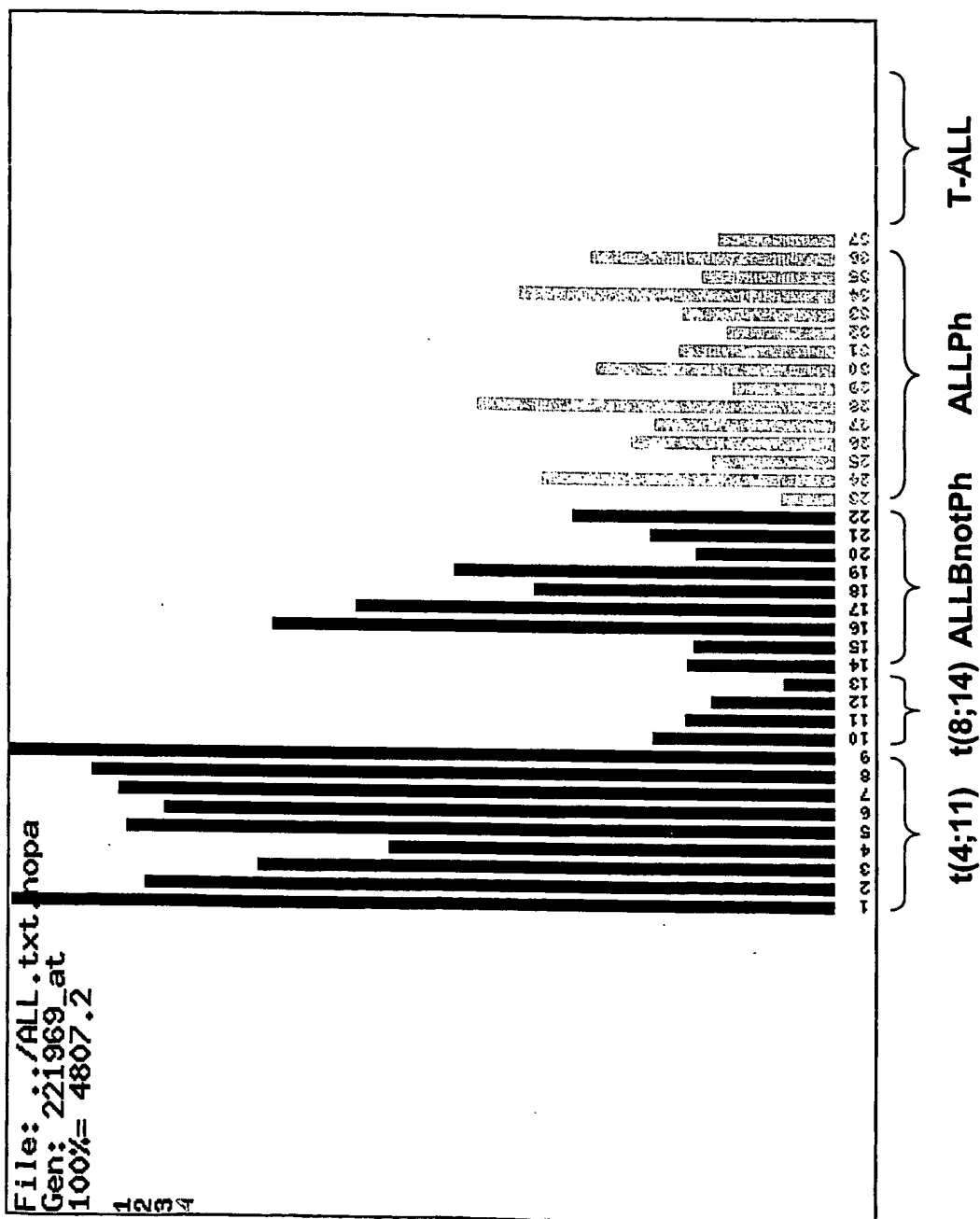


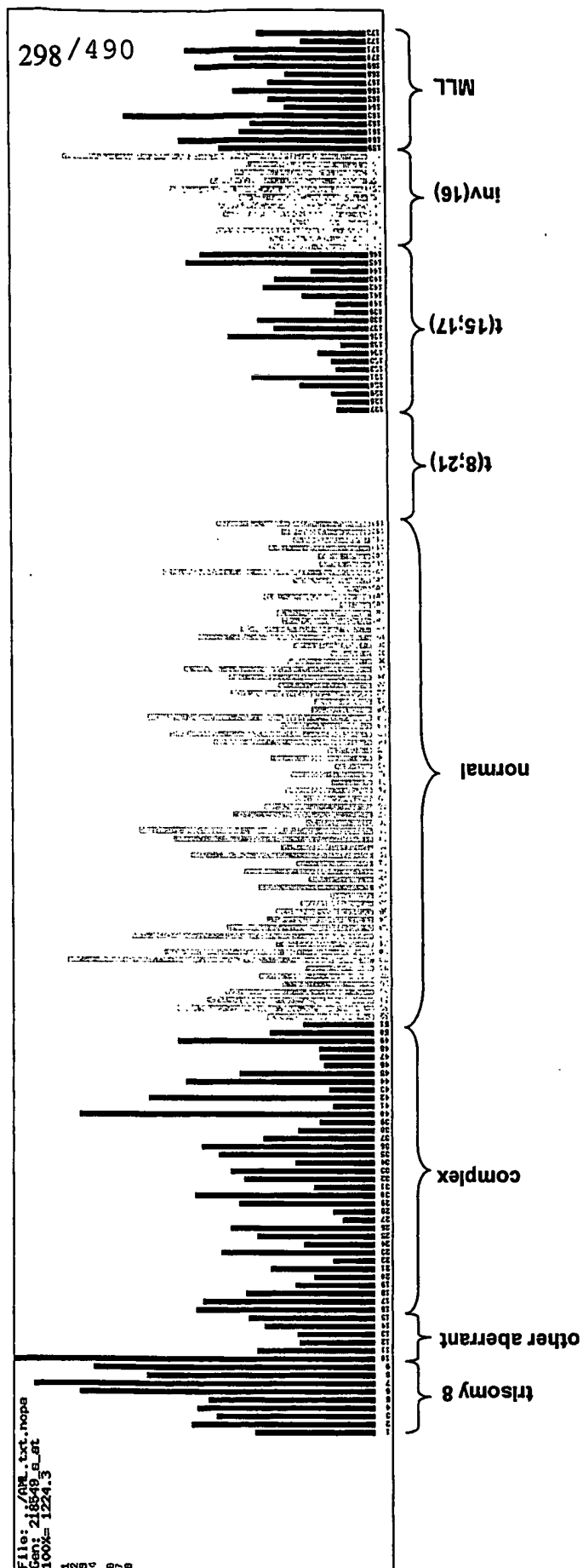
Figure 270

# 221969\_at, PAX5, T-ALL vs. all other



# 218549\_s\_at, LOC51115, trisomy 8 vs. other aberrant

Figure 272



235647\_at, trisomy 8 vs. all other AML

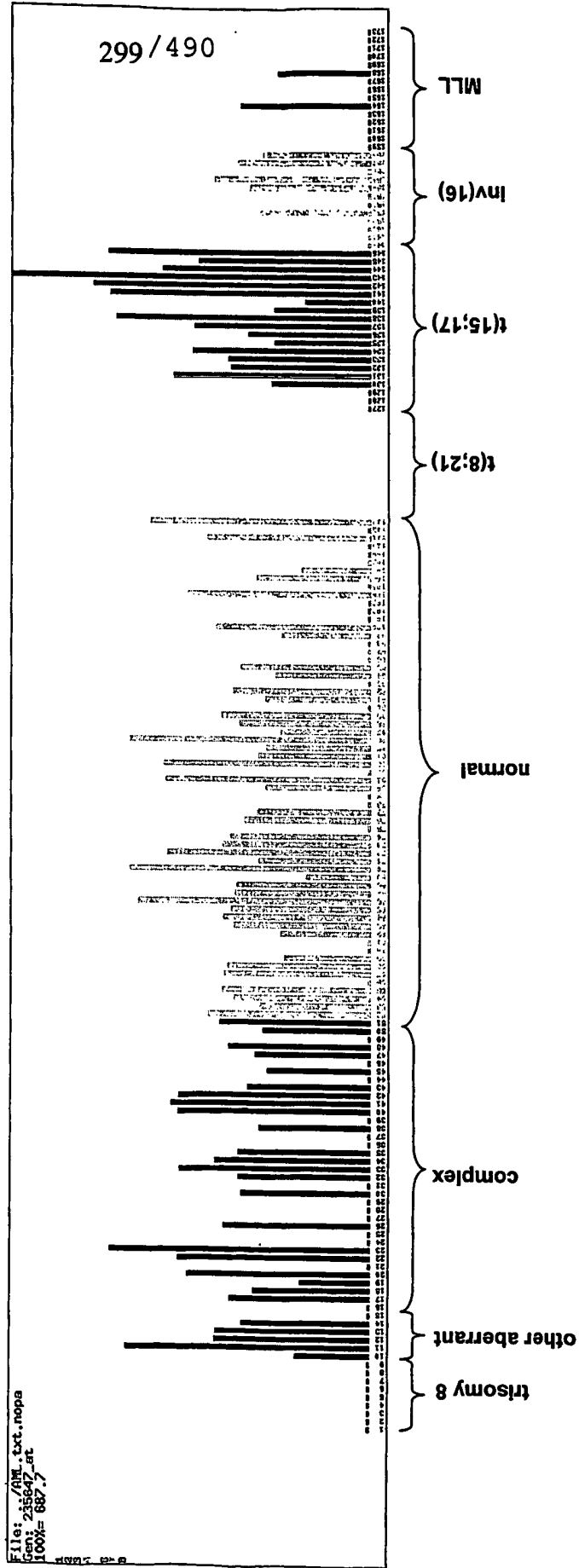
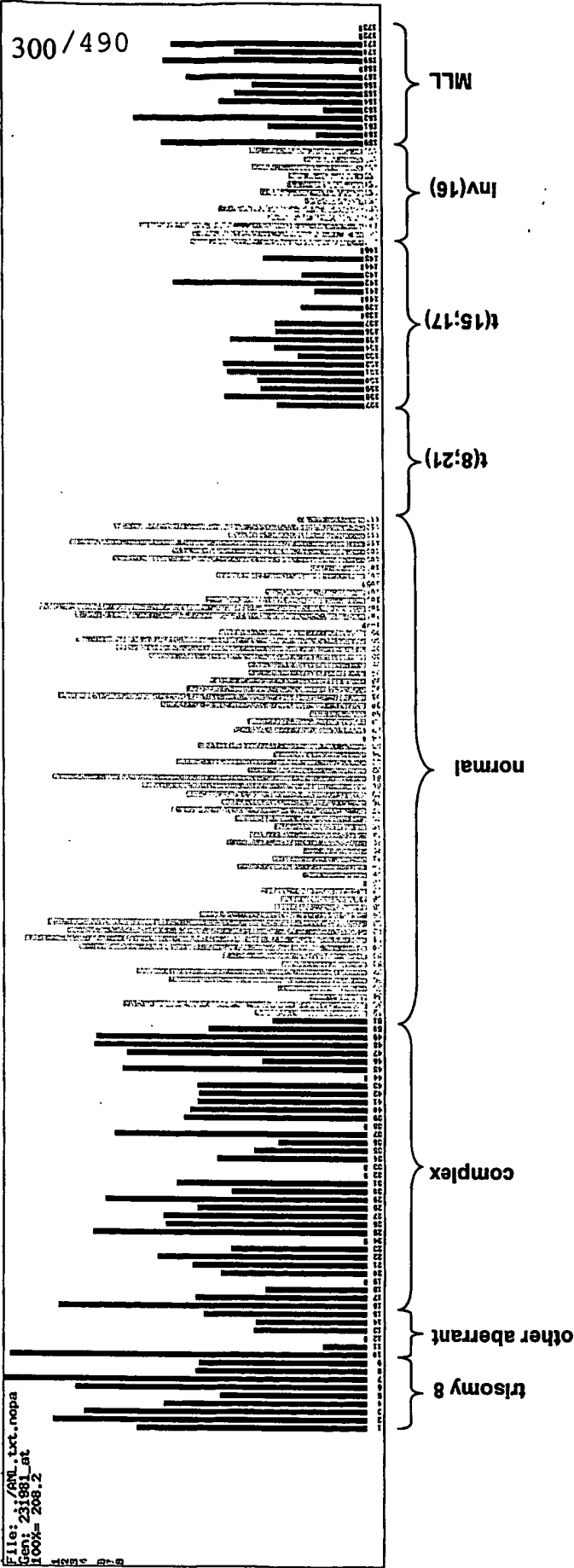


Figure 273

231981\_at, trisomy 8 vs. all other AML

Figure 274





229848\_at, ZNF10, trisomy 8 vs. other aberrant

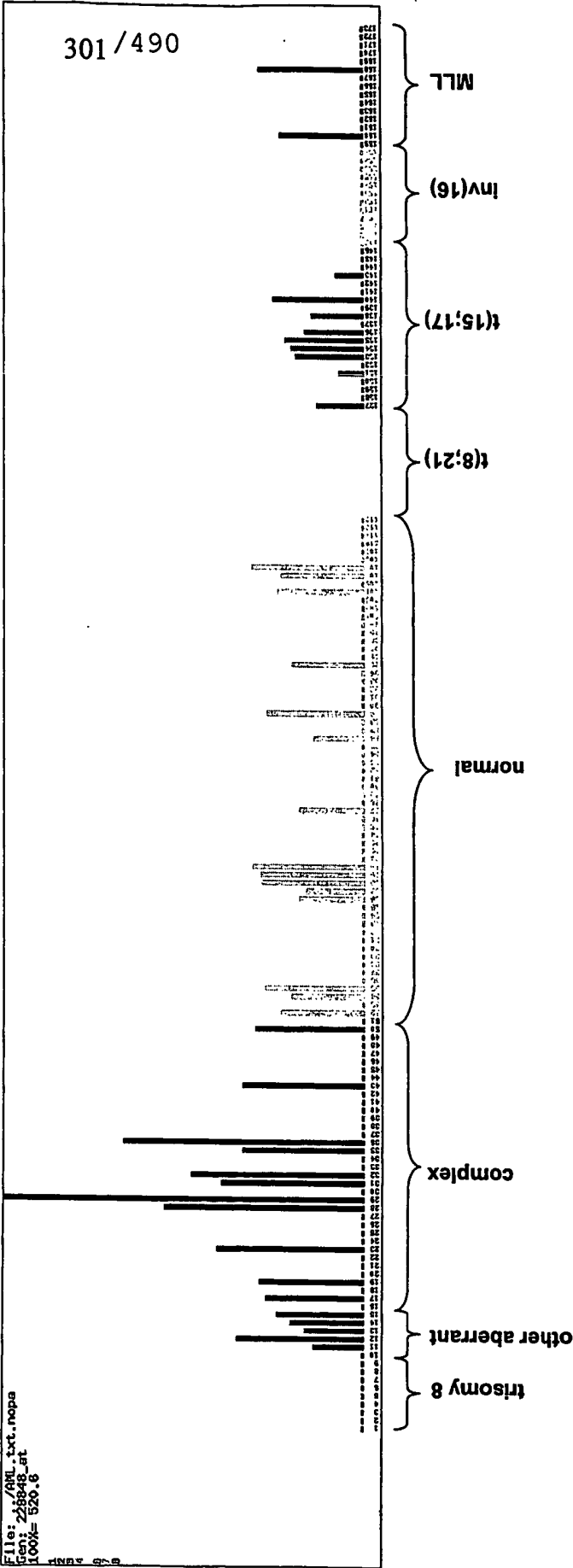
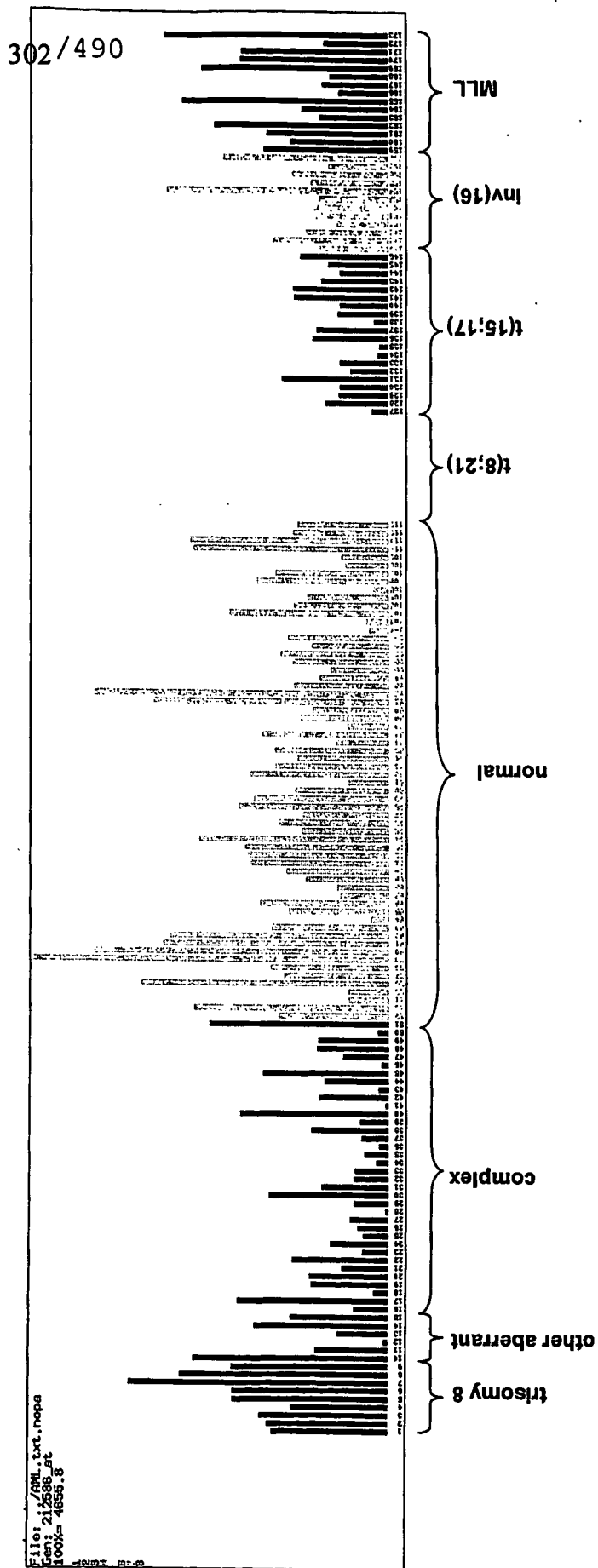


Figure 275

# 212586\_at, ARTS-1, trisomy 8 vs. complex

Figure 276



# 226545\_at, trisomy 8 vs. complex

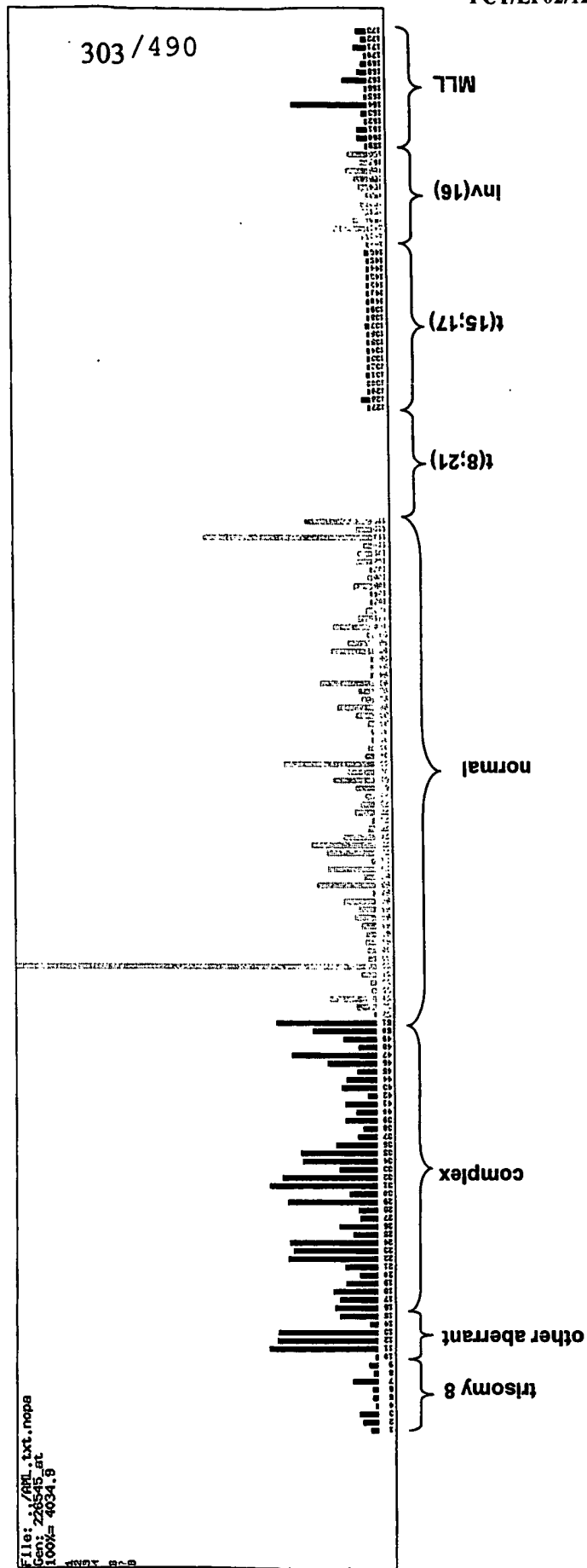
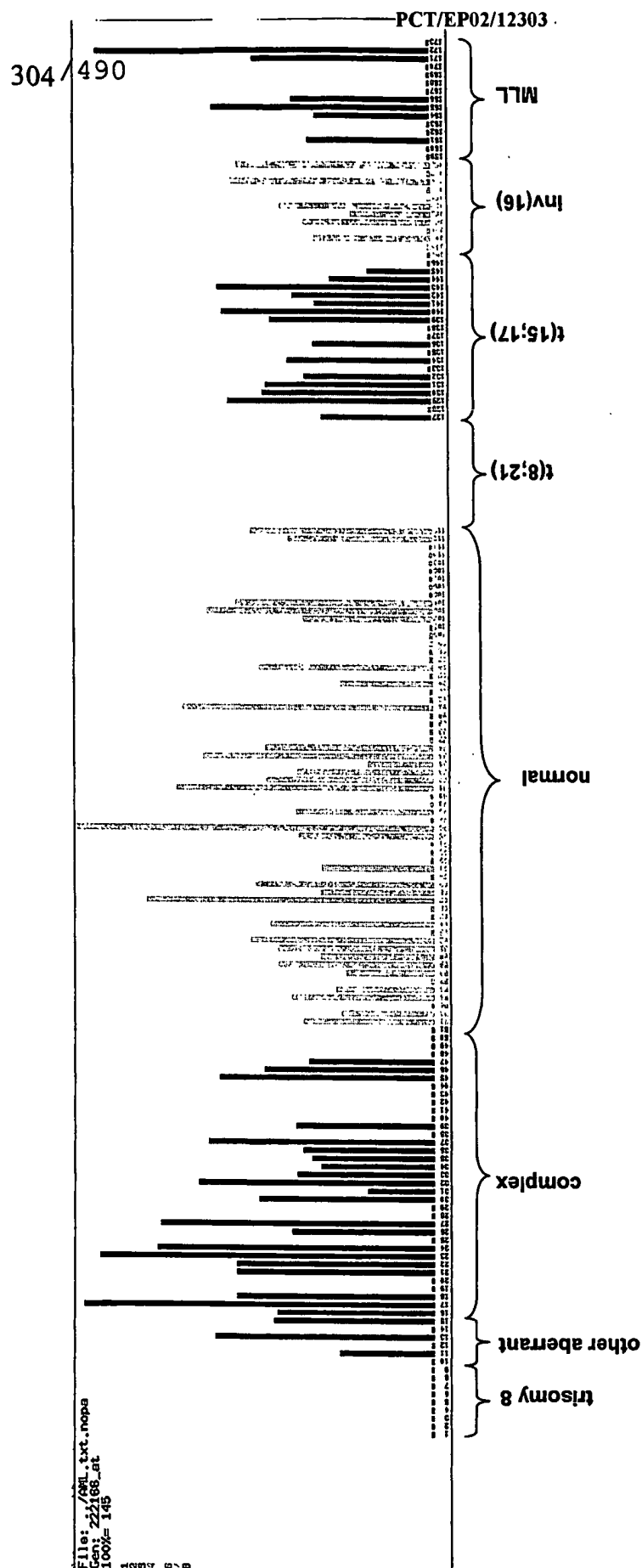


Figure 277

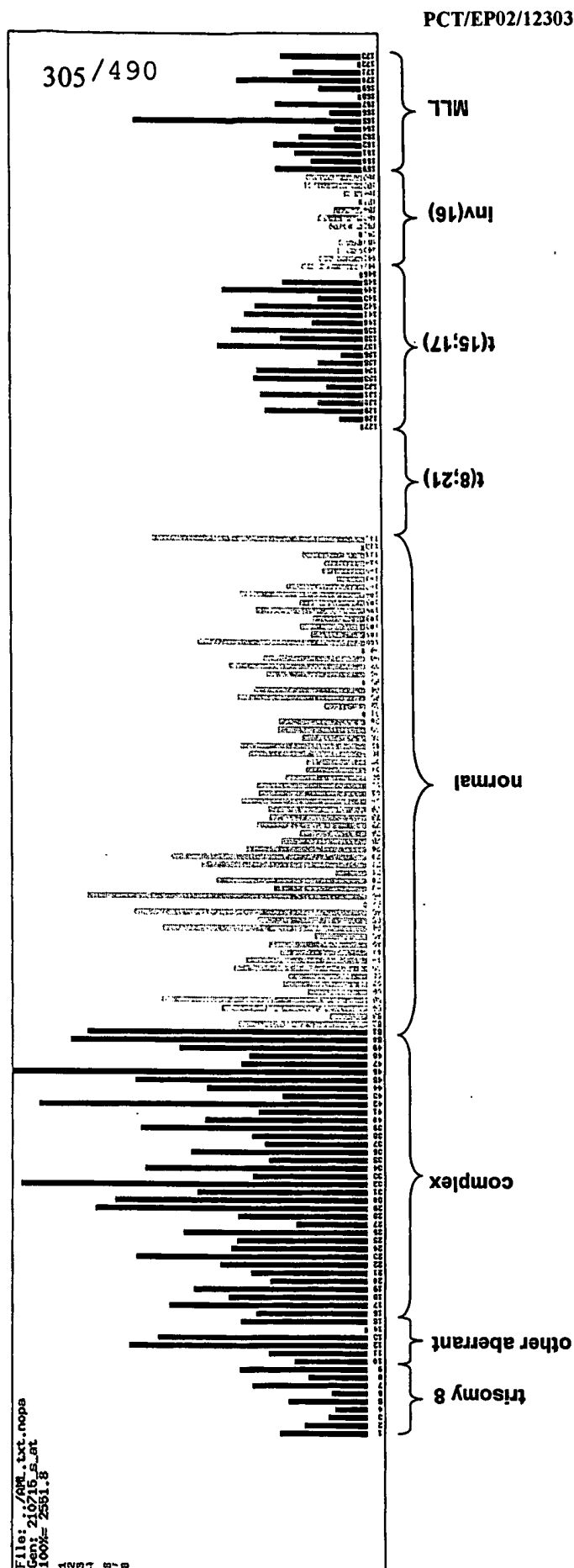
# 222166\_at, trisomy 8 vs. complex

Figure 278



# 210715\_s\_at, SPINT2, trisomy 8 vs. complex

Figure 279



217979\_at, NET-6, trisomy 8 vs. complex

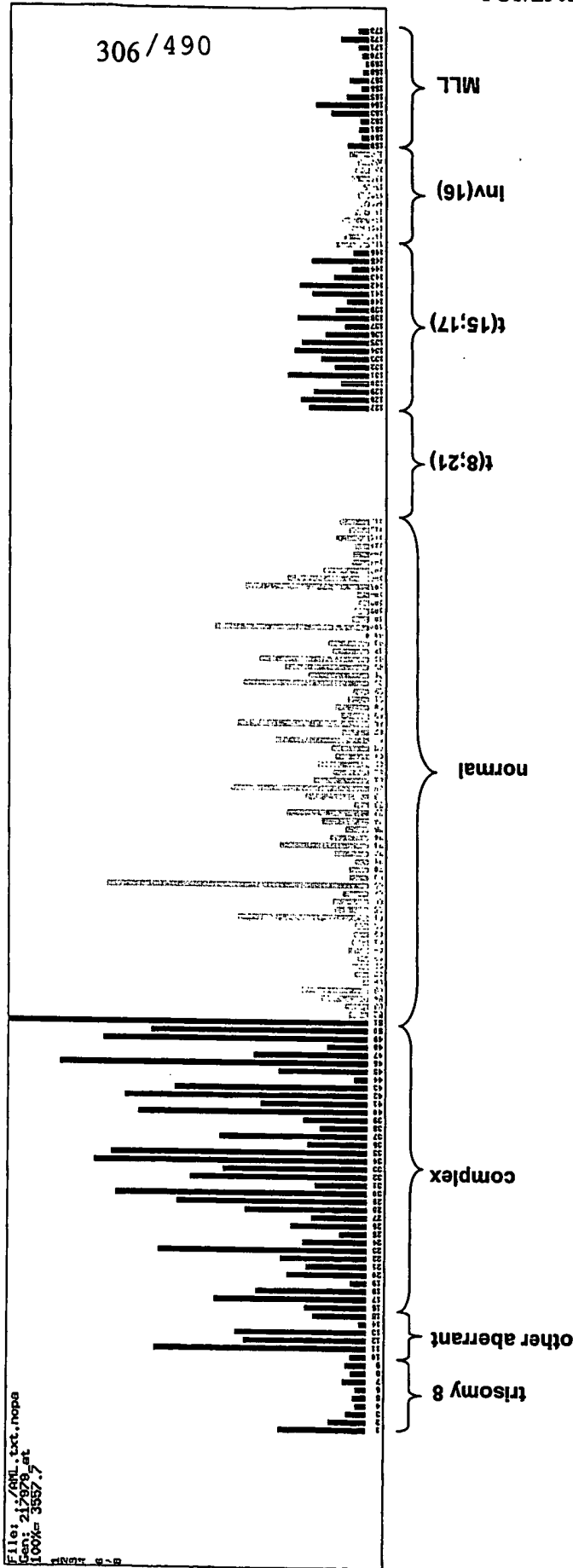
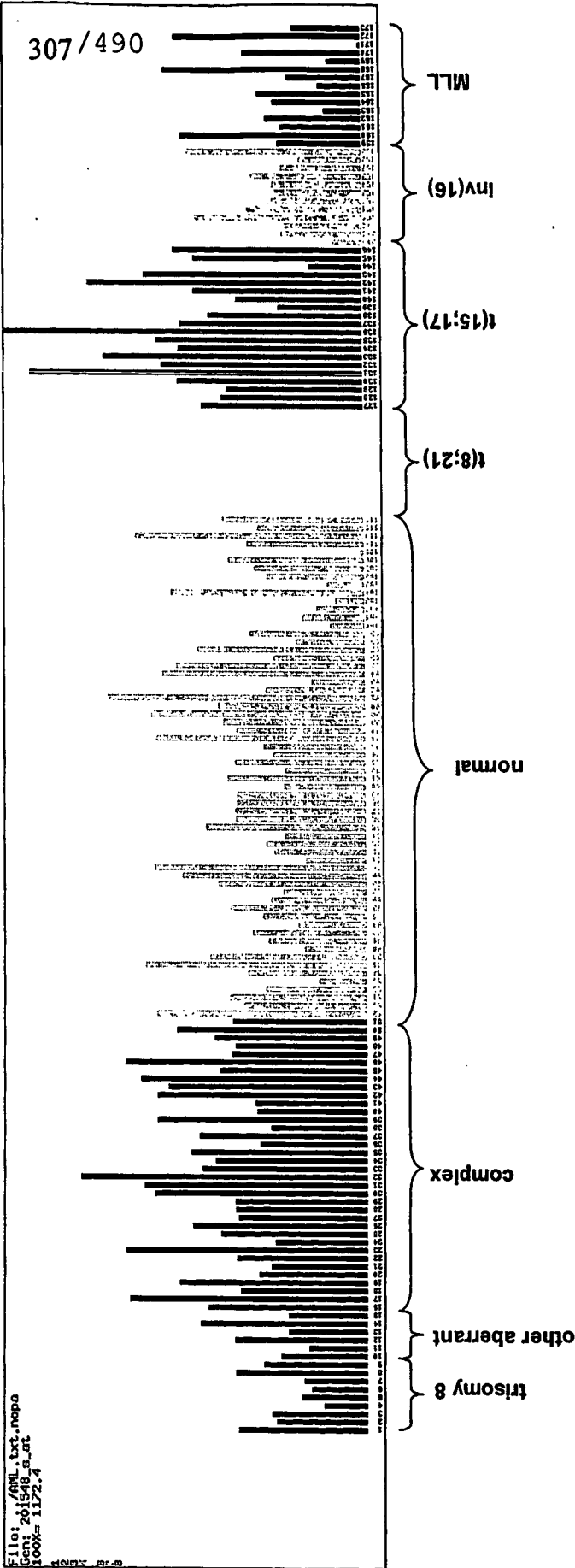


Figure 280

201548\_s\_at, PLU-1, trisomy 8 vs. complex

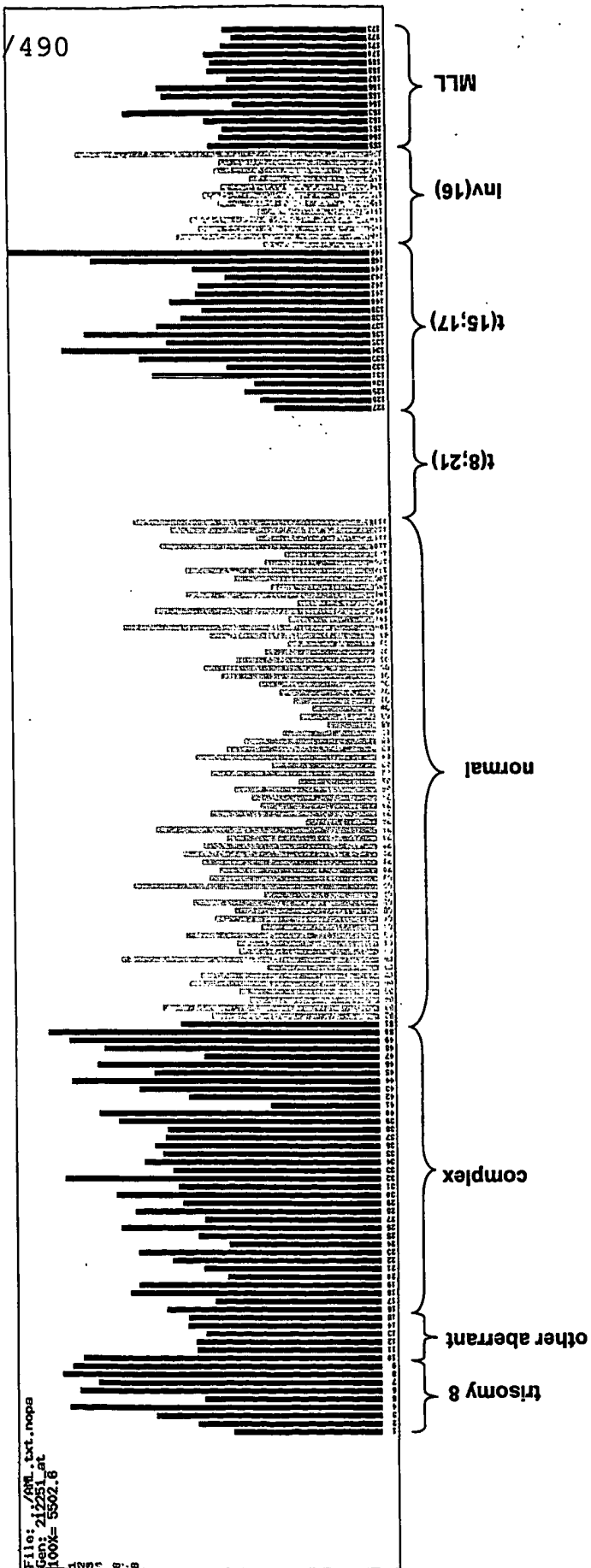
Figure 281



# 212251\_at, trisomy 8 vs. normal

Figure 282

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228827\_at, trisomy 8 vs. t(8;21)

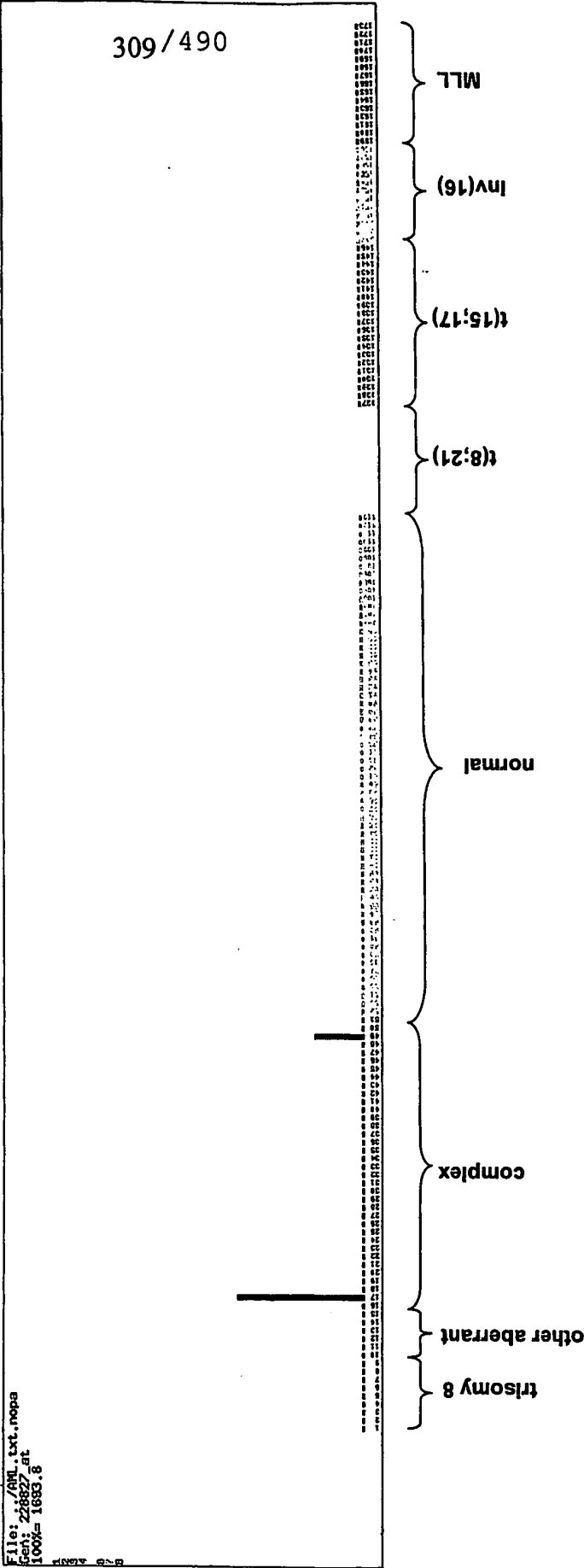


Figure 283

# 214450\_at, CTSW, trisomy 8 vs. t(15;17)

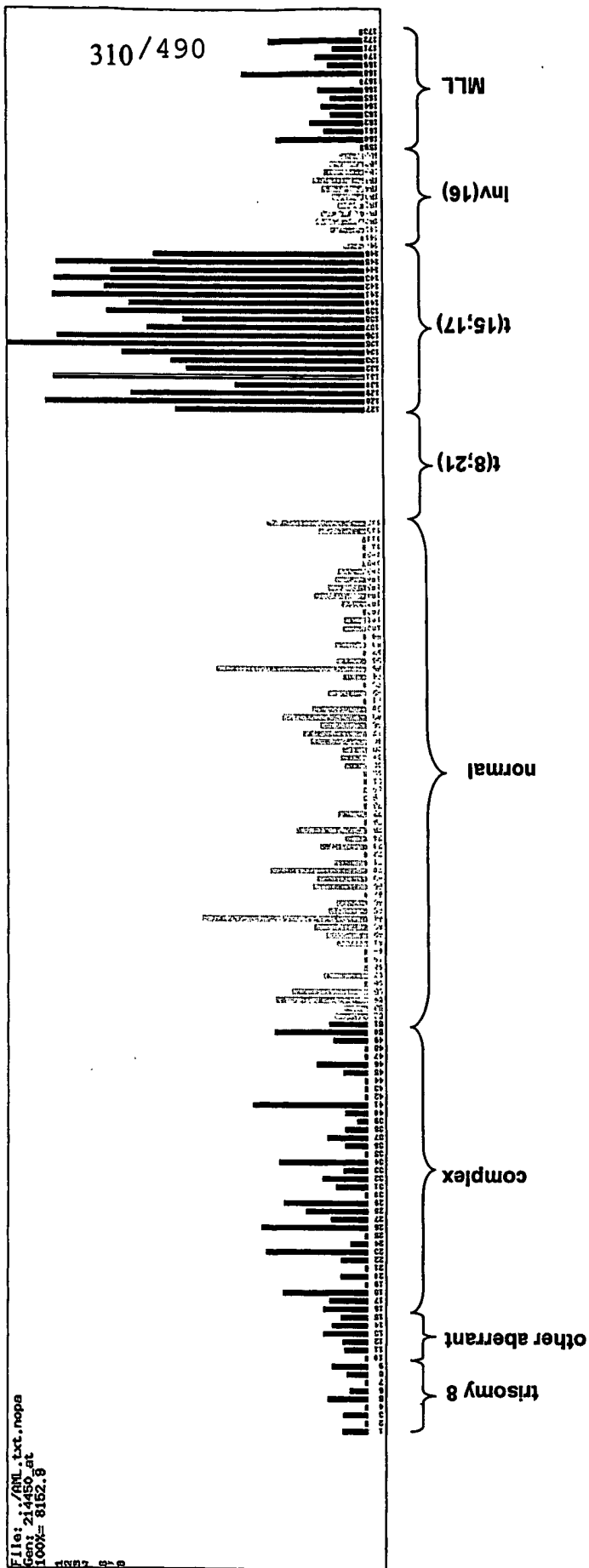


Figure 284

233138\_at, trisomy 8 vs. inv(16)

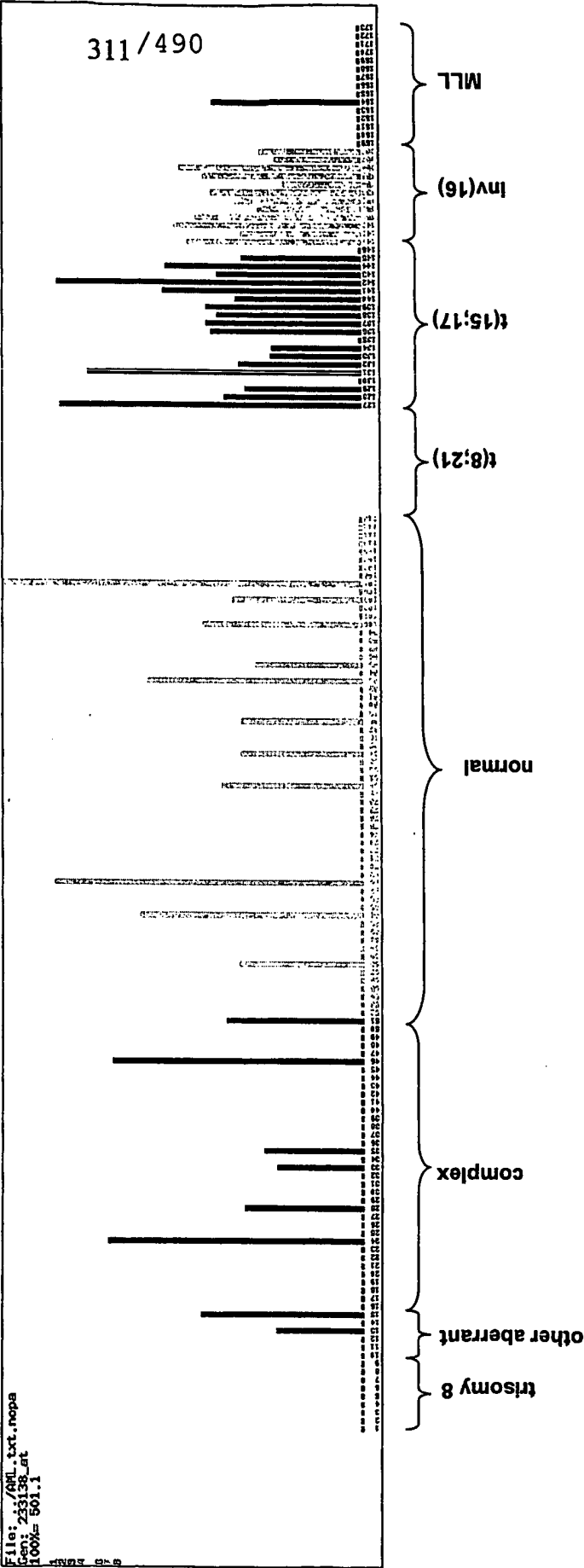


Figure 285

212479\_s\_at, FLJ13910, trisomy 8 vs. MLL

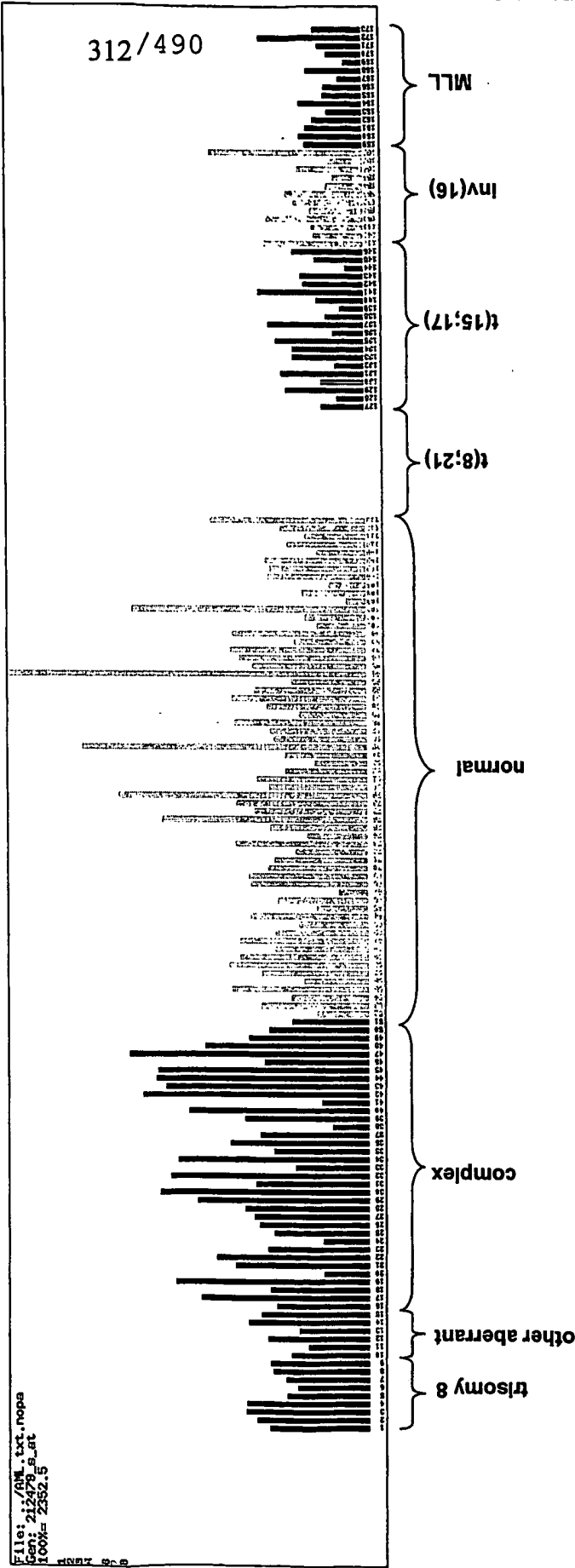


Figure 286

# 218172\_s\_at, PRO2577, trisomy 8 vs. MLL

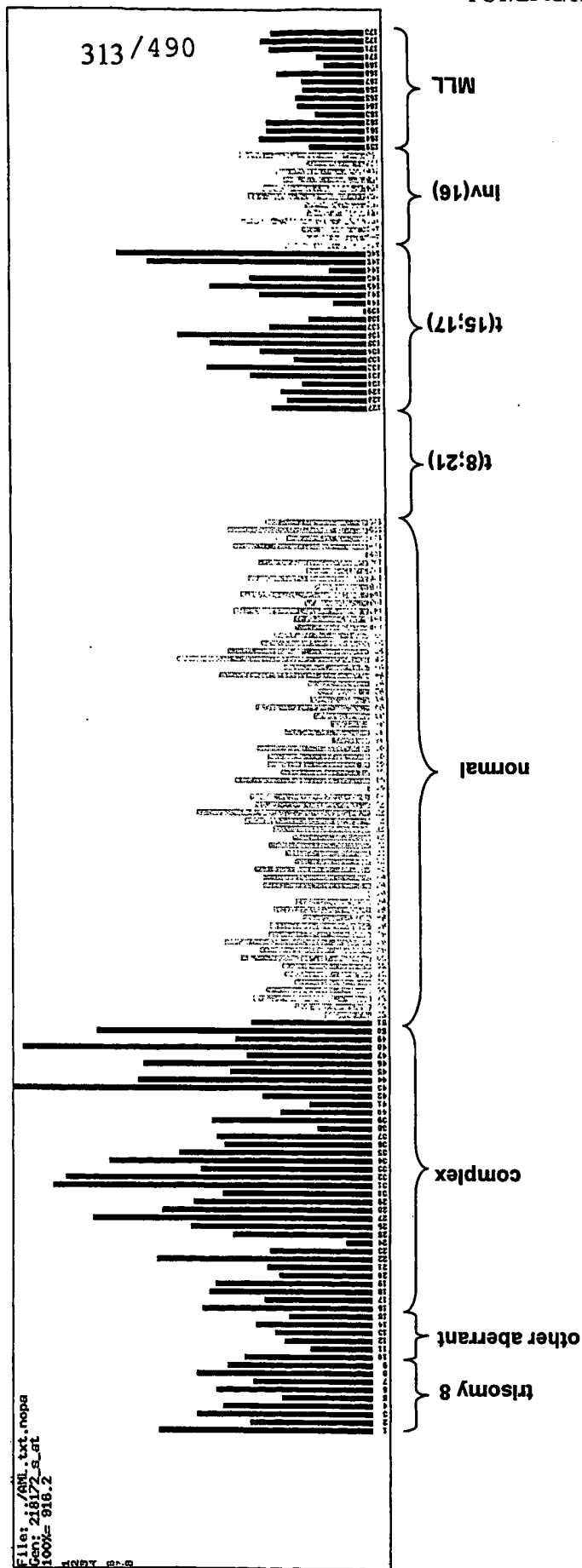


Figure 287

# 200867\_at, trisomy 8 vs. MLL

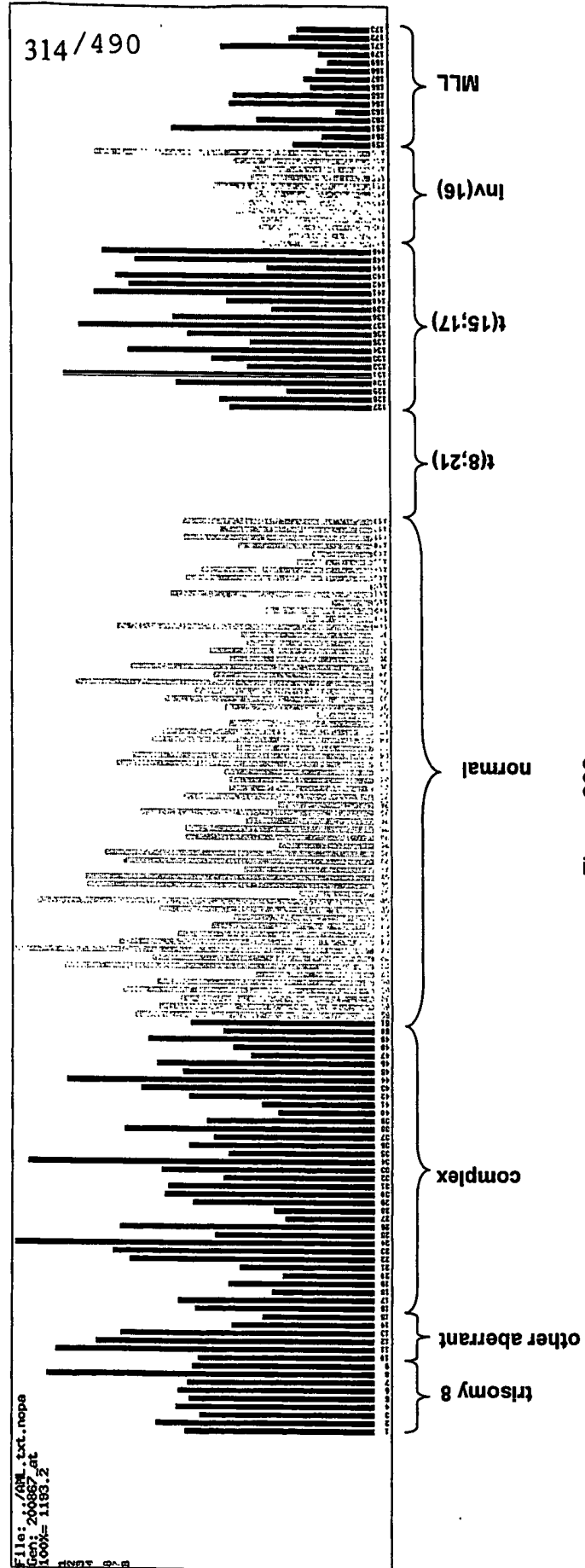


Figure 288

# 202956\_at, BIG1, trisomy 8 vs. MLL

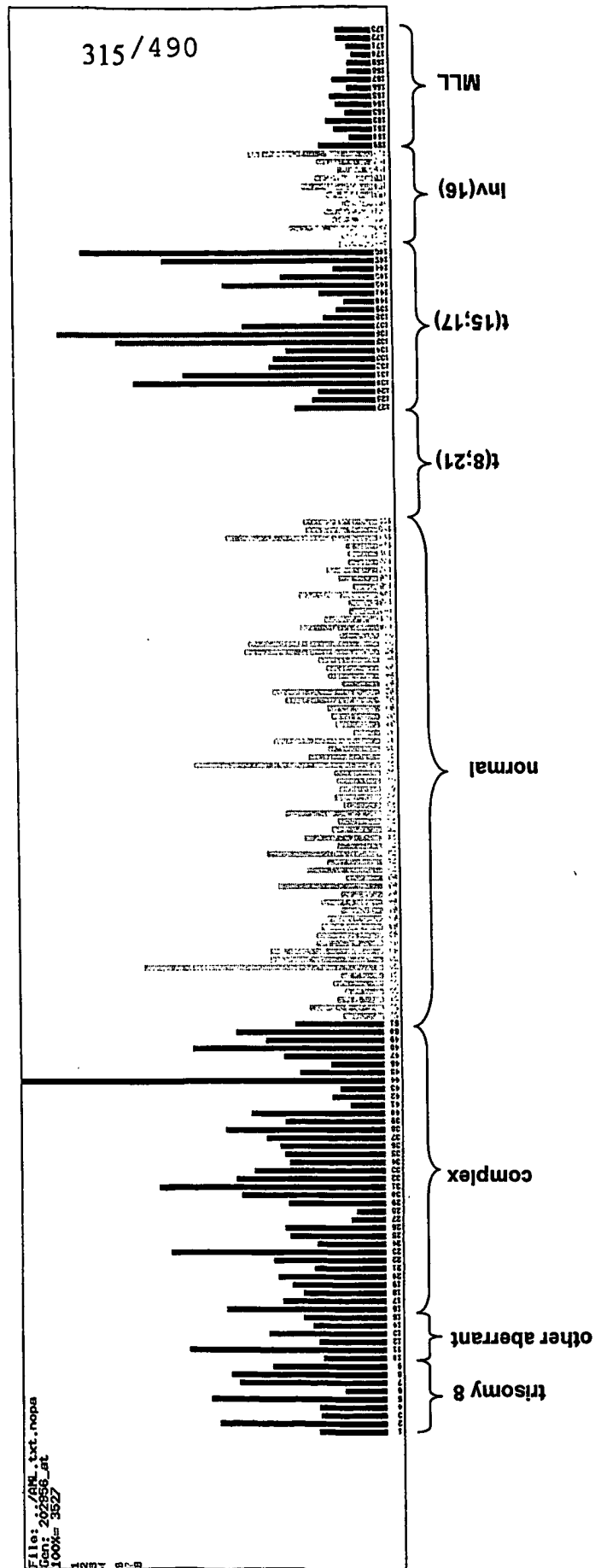
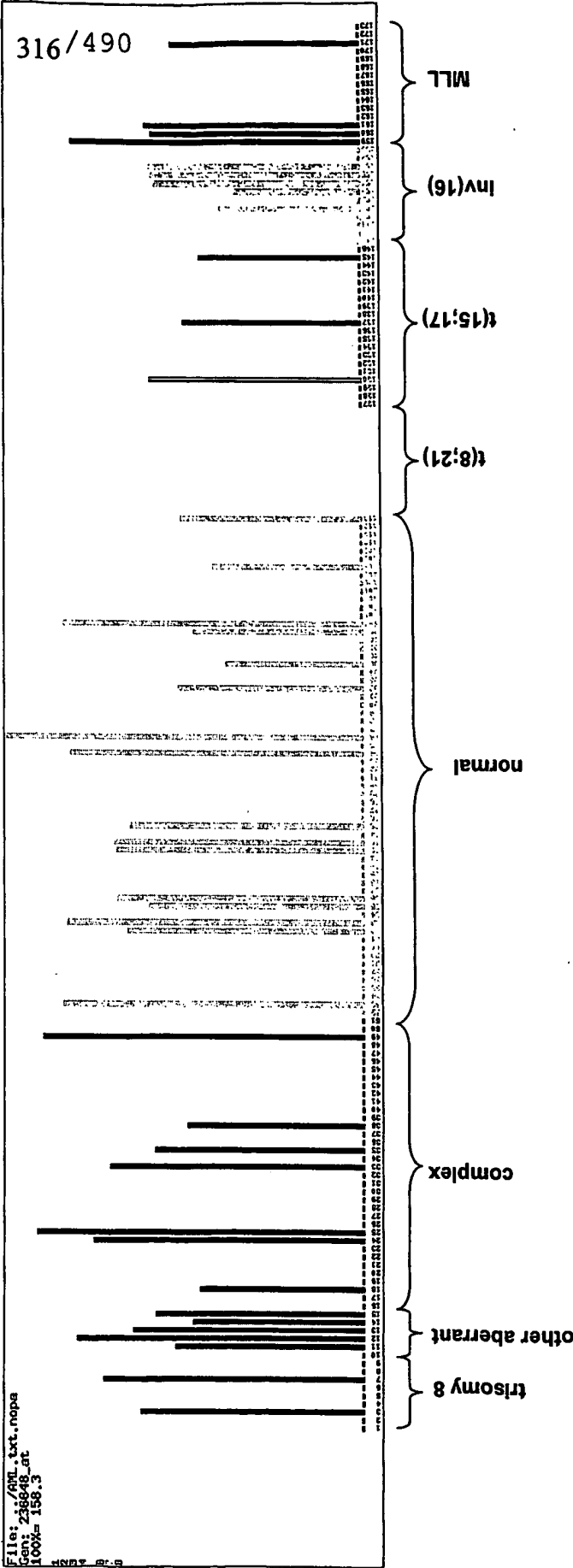


Figure 289

2366648\_at, other aberrant vs. all other AML

Figure 290





# 228660\_x\_at, SEMA4F, other aberrant vs. all other AML

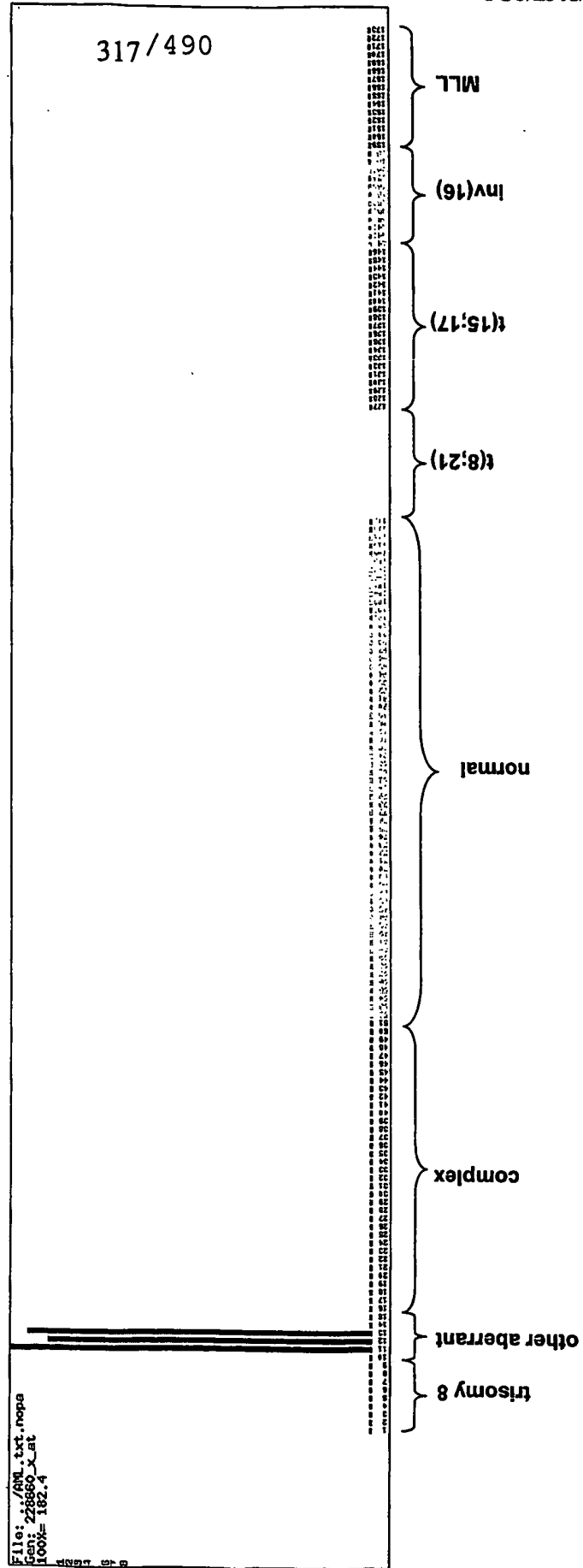
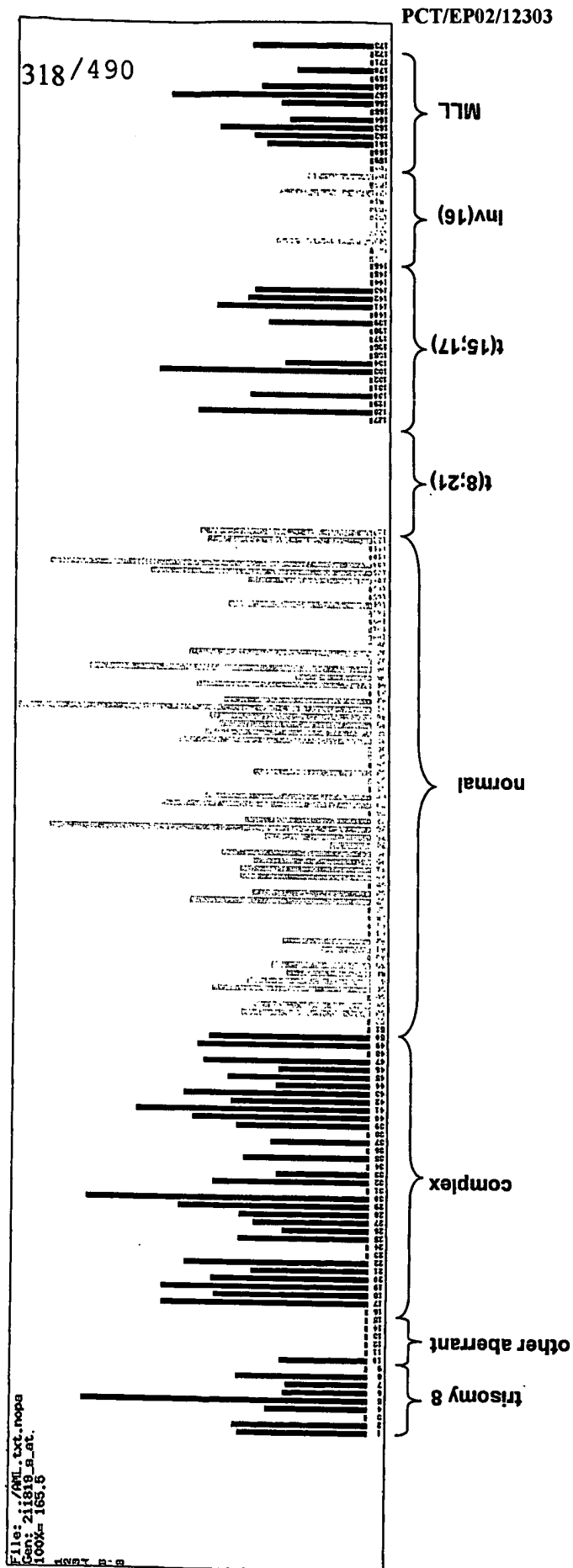


Figure 291

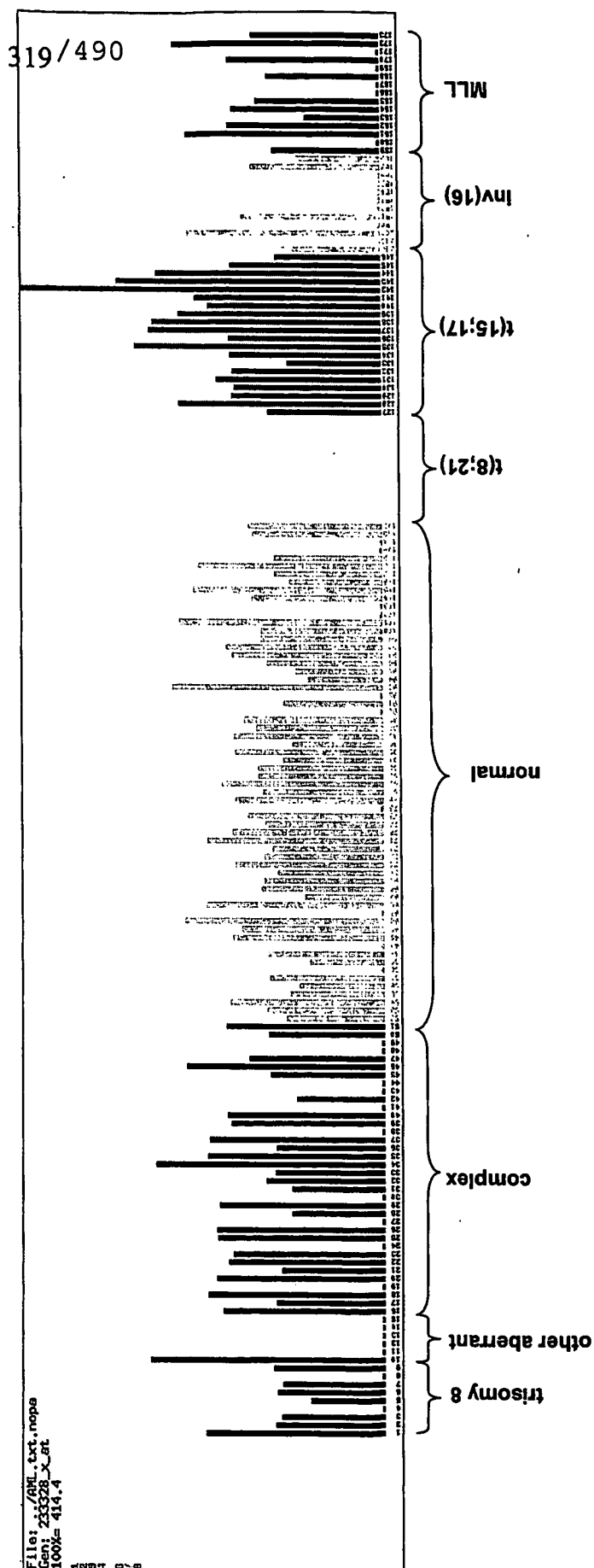
# 211819\_s\_at, SH3D5, other aberrant vs. complex

Figure 292



# 233328\_x\_at, other aberrant vs. complex

Figure 293



229003\_x\_at, other aberrant vs. complex

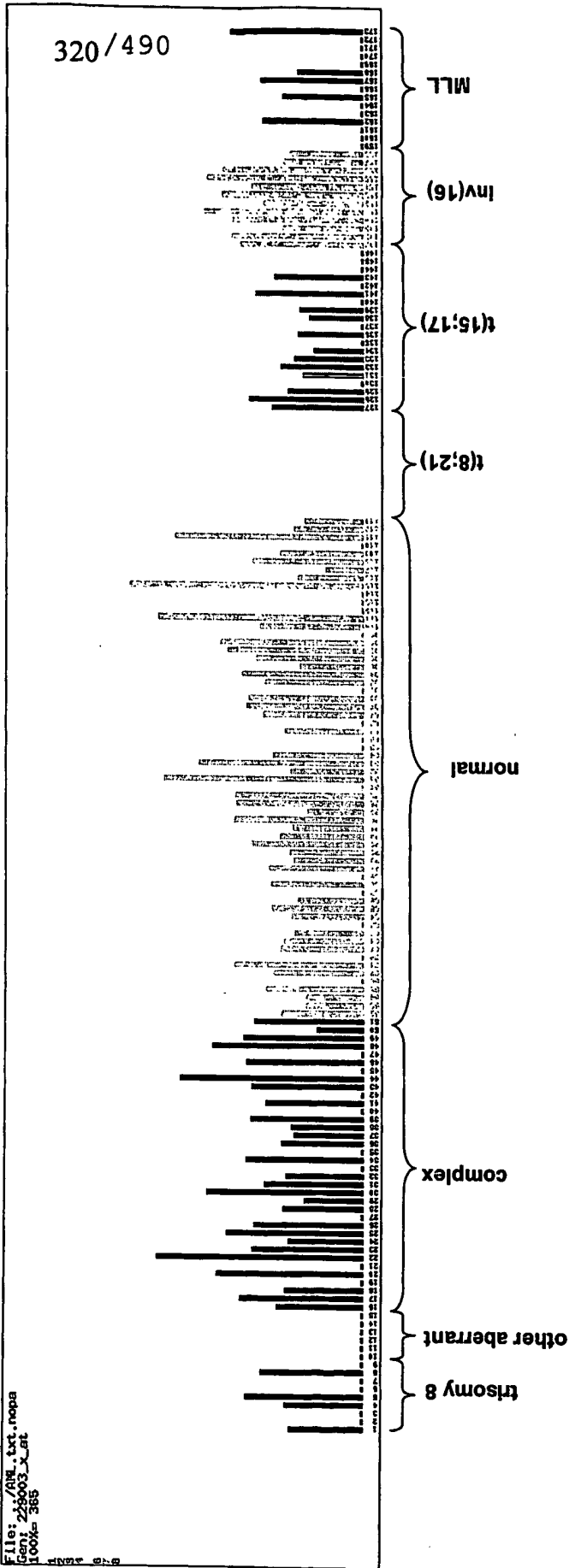
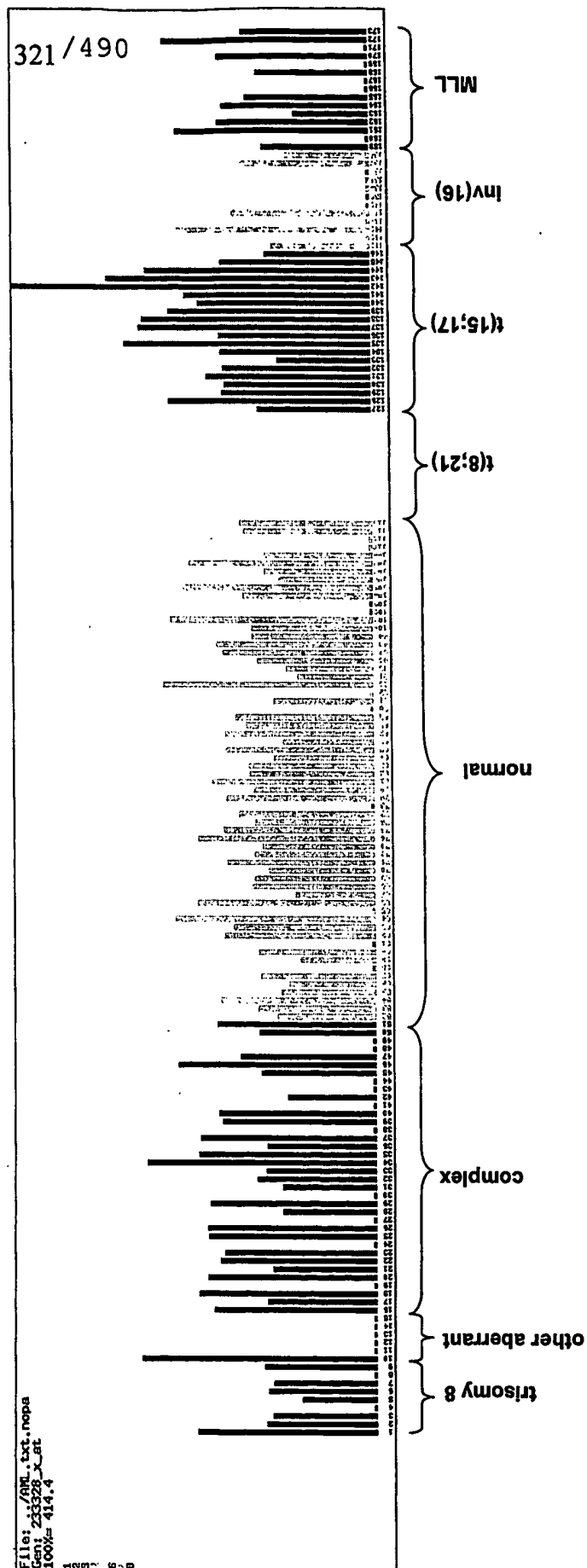


Figure 294

# 233328\_x\_at, other aberrant vs. normal

Figure 295



# 213725\_x\_at, other aberrant vs. normal

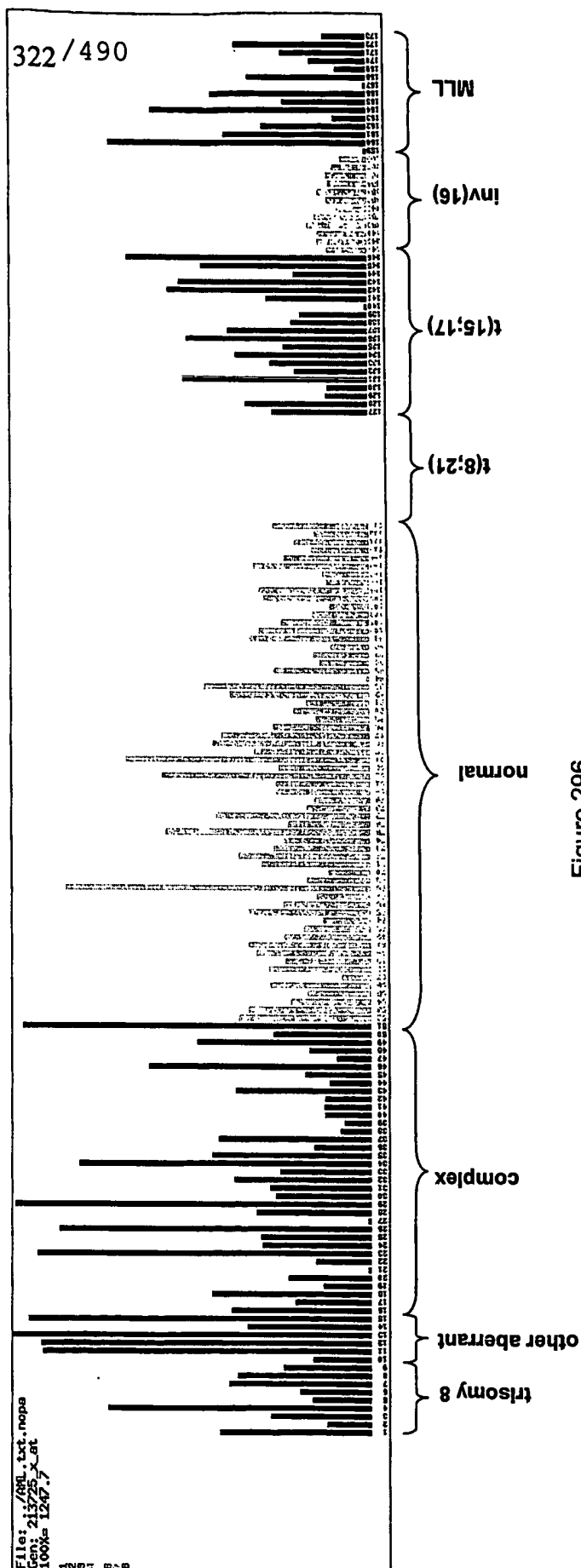
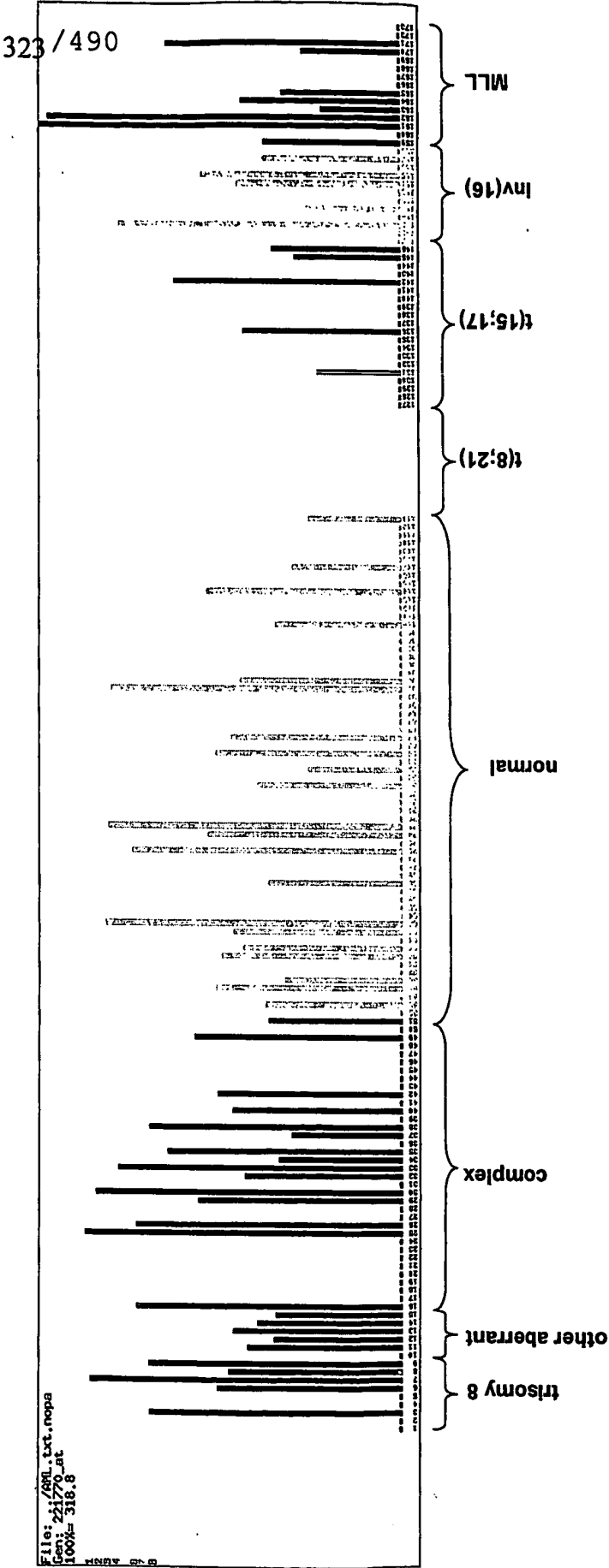


Figure 296

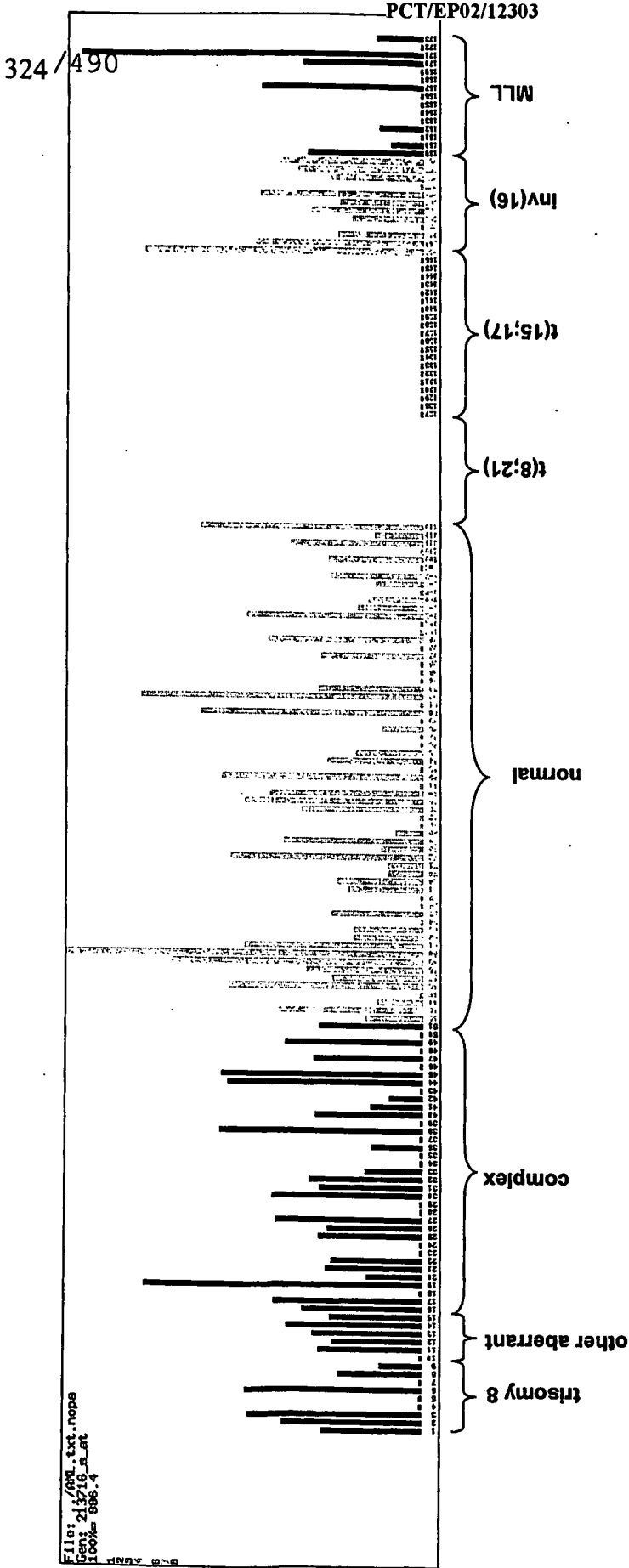
221770\_at, RPE, other aberrant vs. t(8;21)

Figure 297



213716\_s\_at, SECTM1, other aberrant vs. t(15;17)

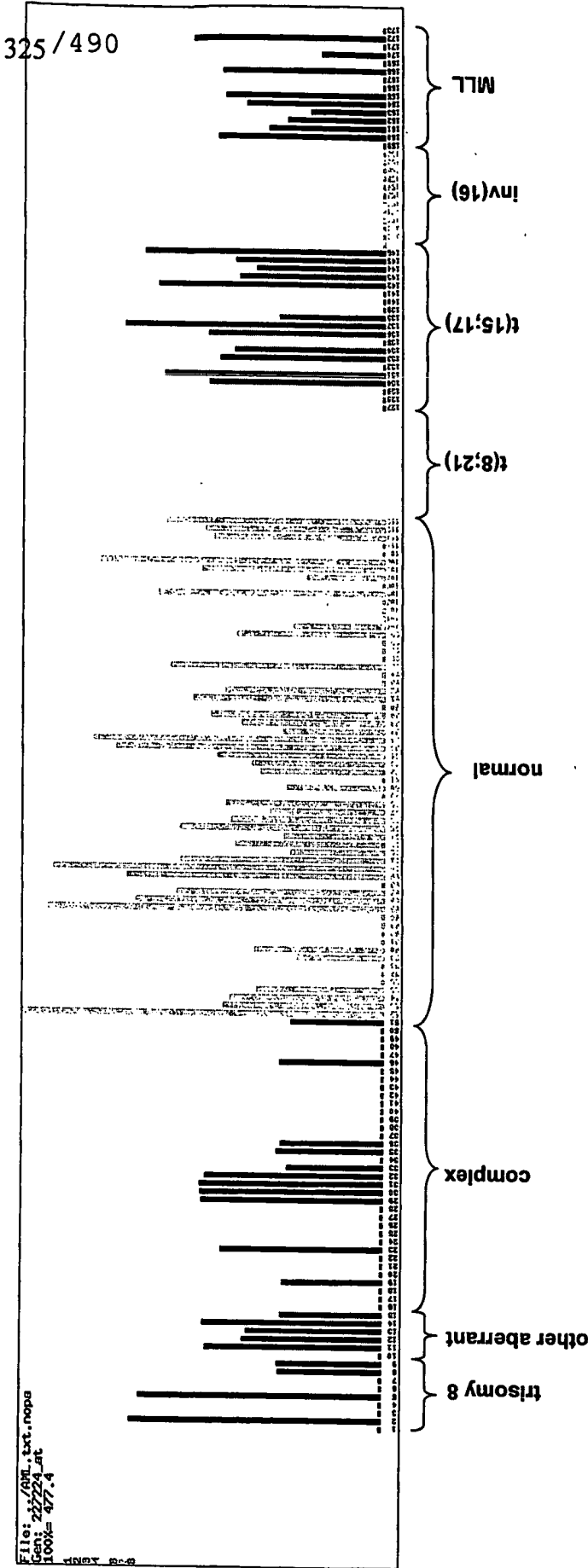
Figure 298





227224\_at, other aberrant vs. inv(16)

Figure 299



232125\_at, other aberrant vs. MLL

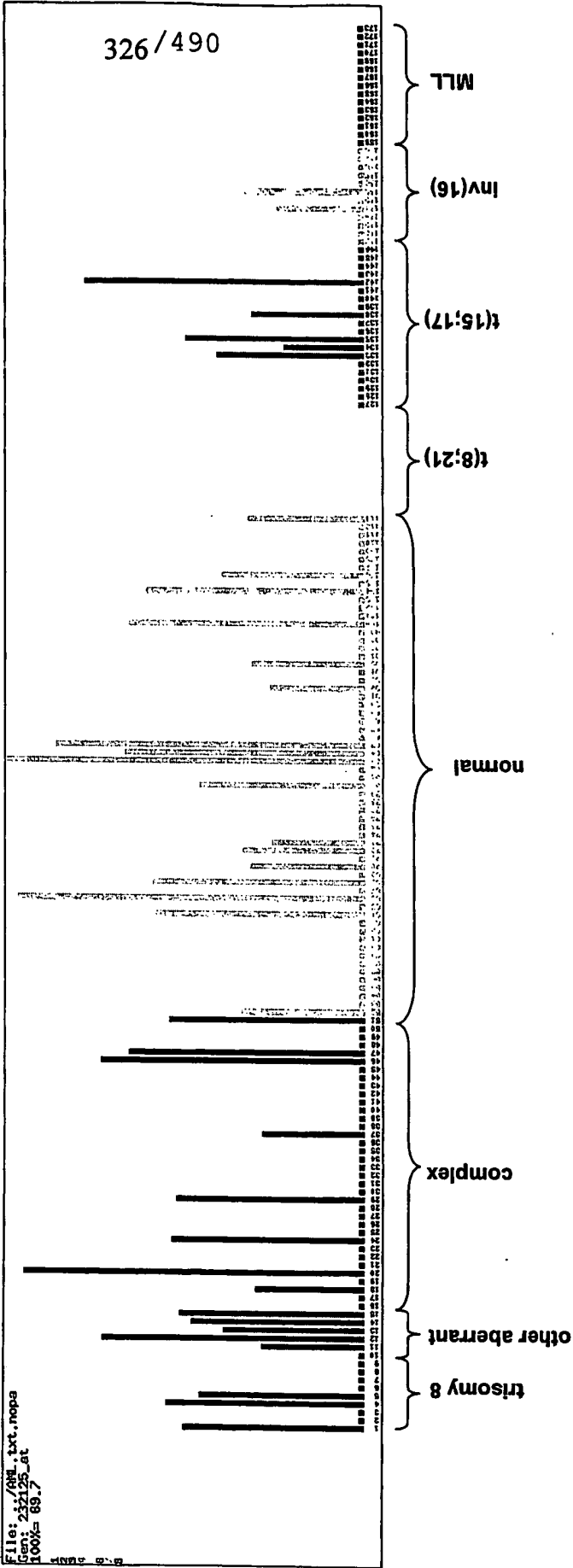
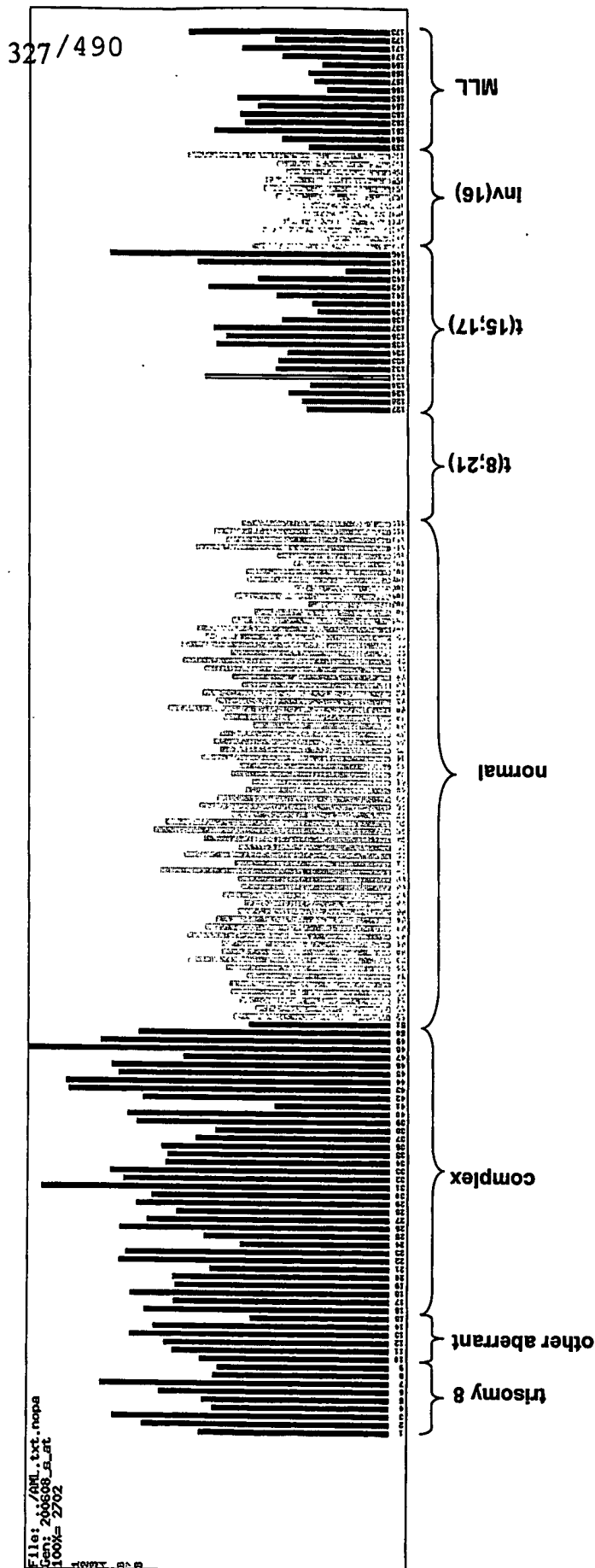


Figure 300

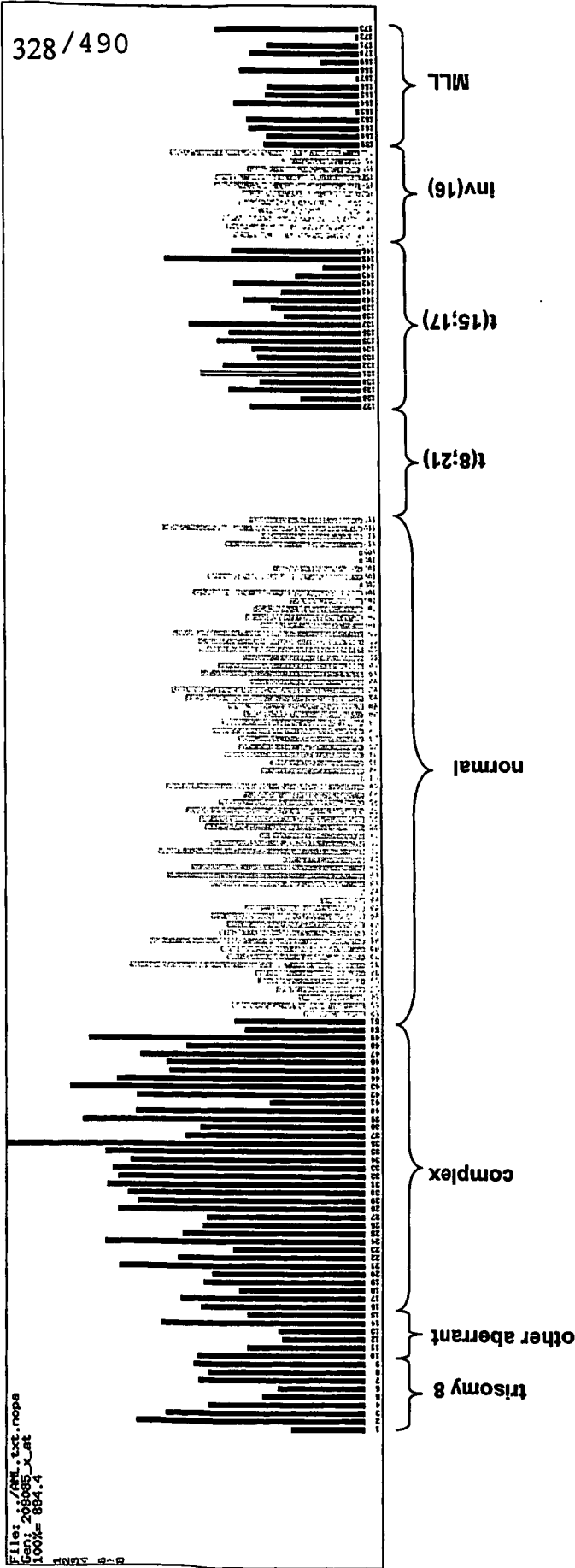
# 200608\_s\_at, RAD21, complex vs. all other AML

Figure 301



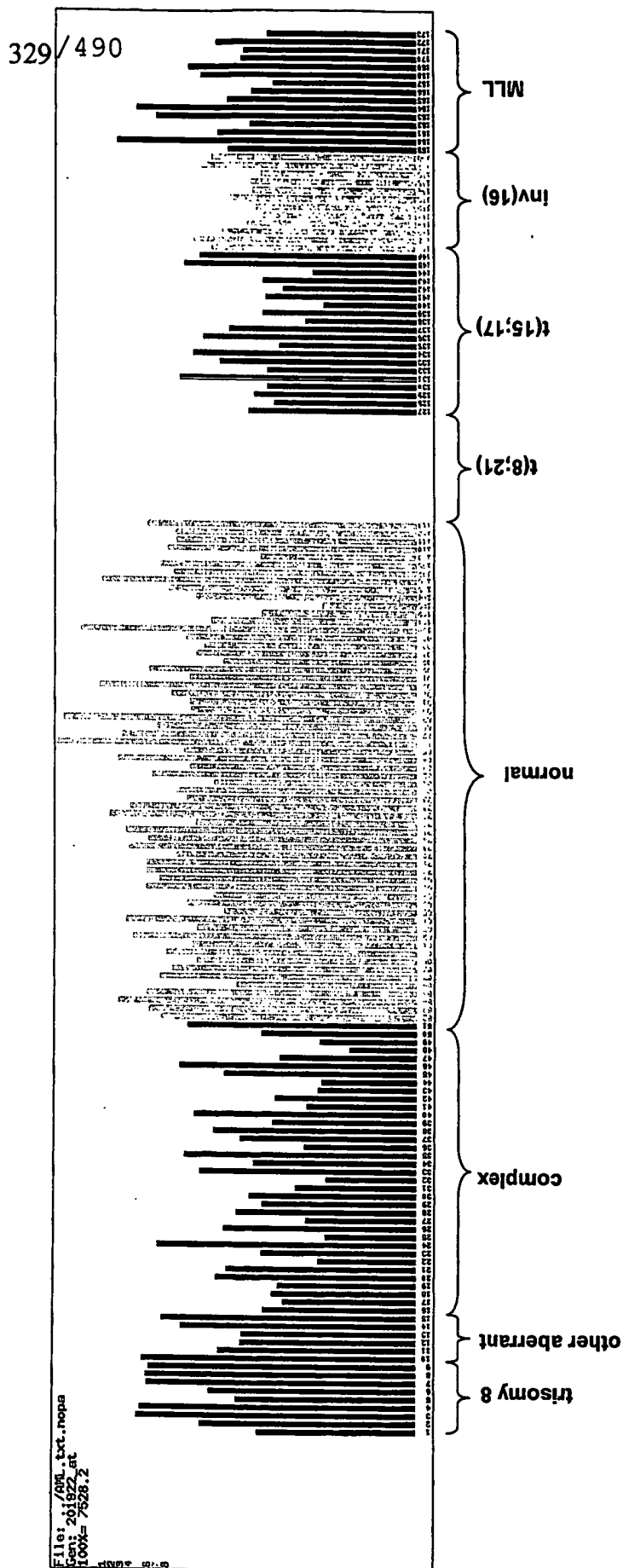
209085\_x\_at, RFC1, complex vs. all other AML

Figure 302



# 201922\_at, YR-29, complex vs. normal

Figure 303



239791\_at, HOXB6, complex vs. normal

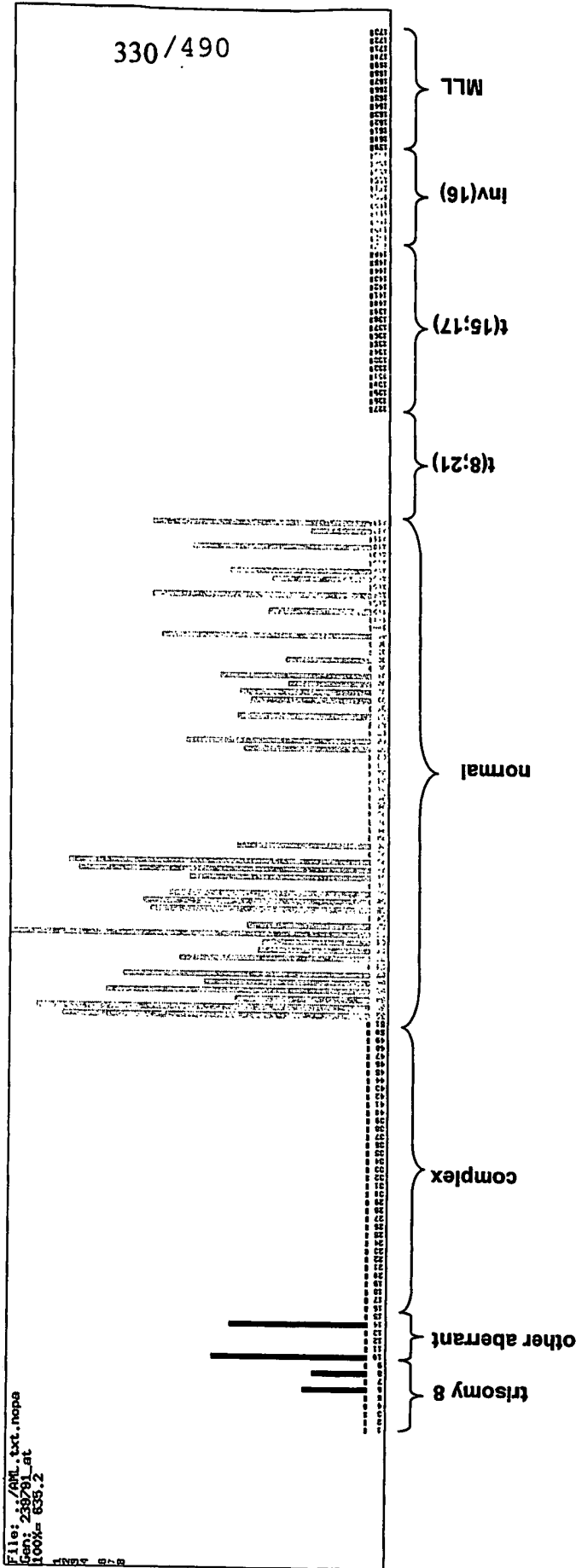
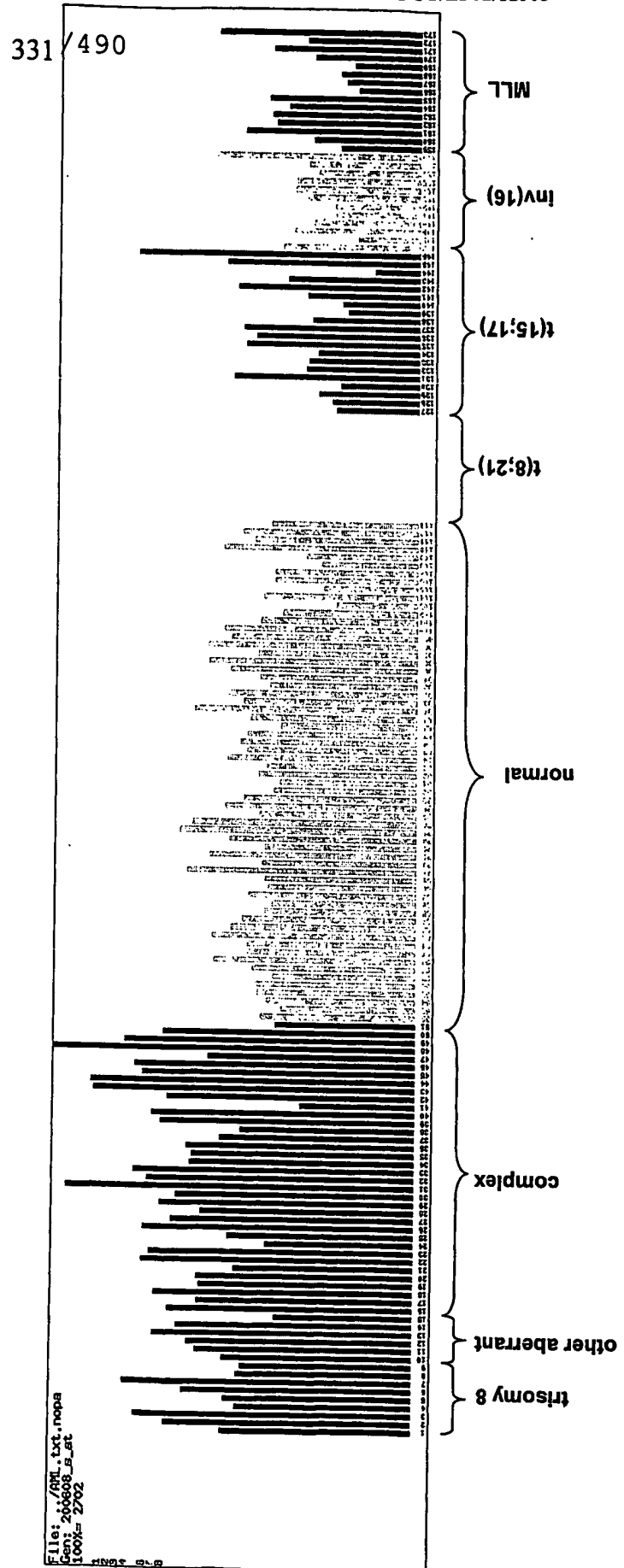


Figure 304

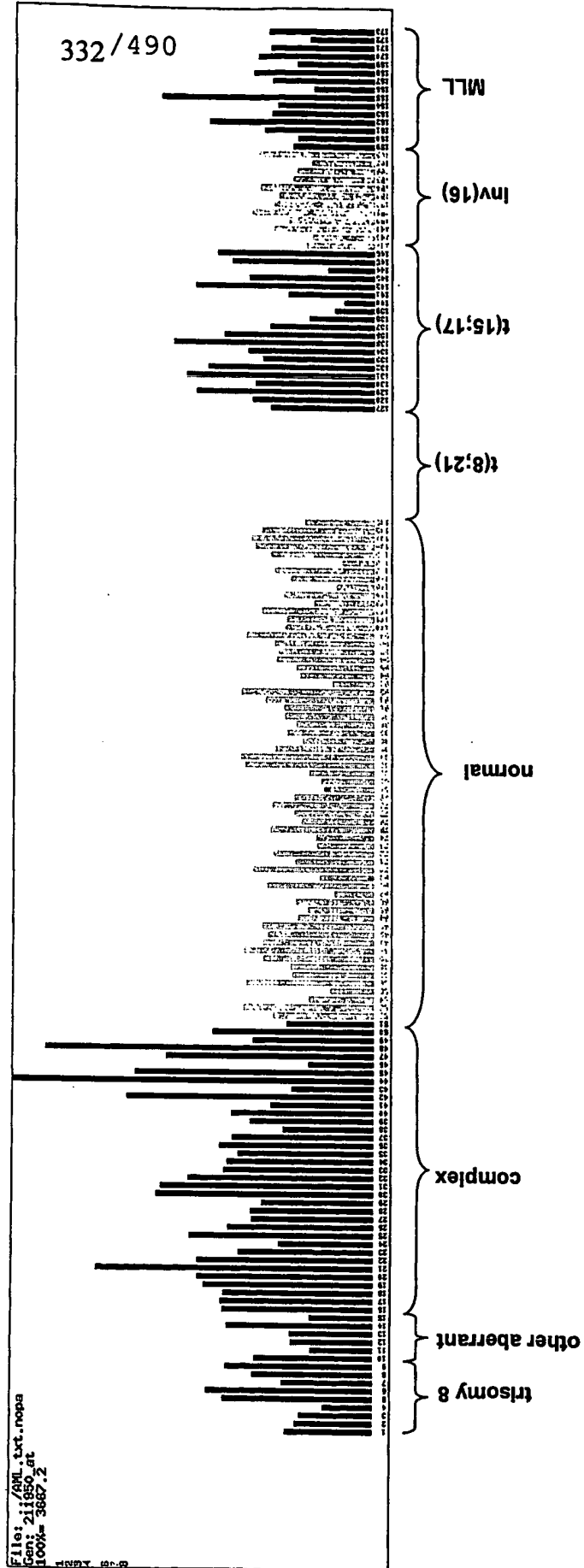
# 200608\_s\_at, RAD21, complex vs. normal

Figure 305



# 211950\_at, RBAF600, complex vs. normal

Figure 306





228827\_at, complex vs. t(8;21)

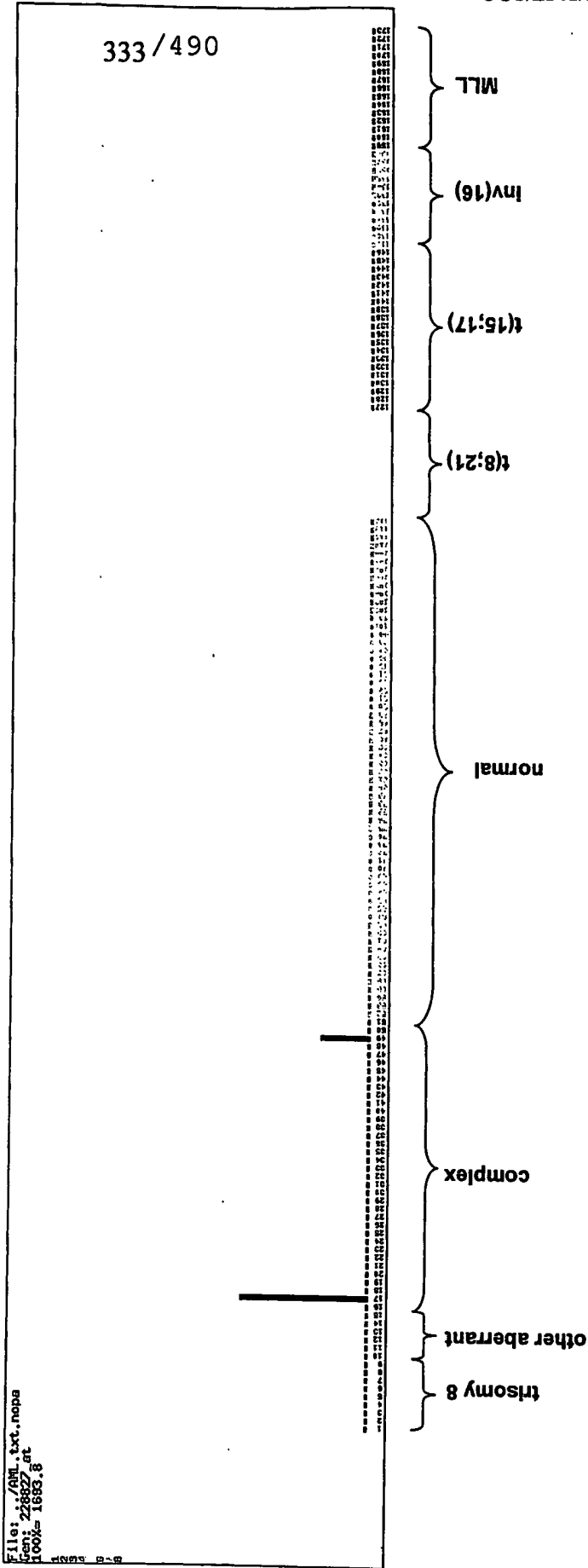
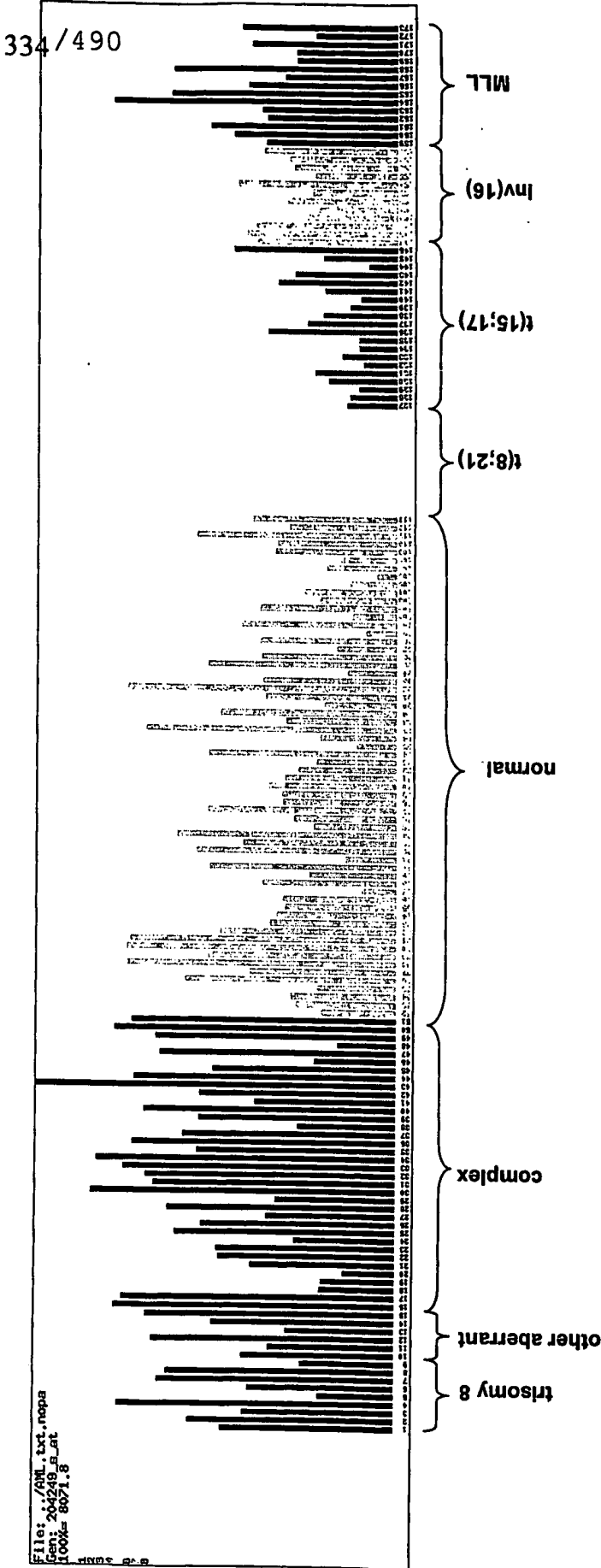


Figure 307

204249\_s\_at, LMO2, complex vs. t(8;21)

Figure 308



# 212953\_x\_at, CALR, complex vs. t(15;17)

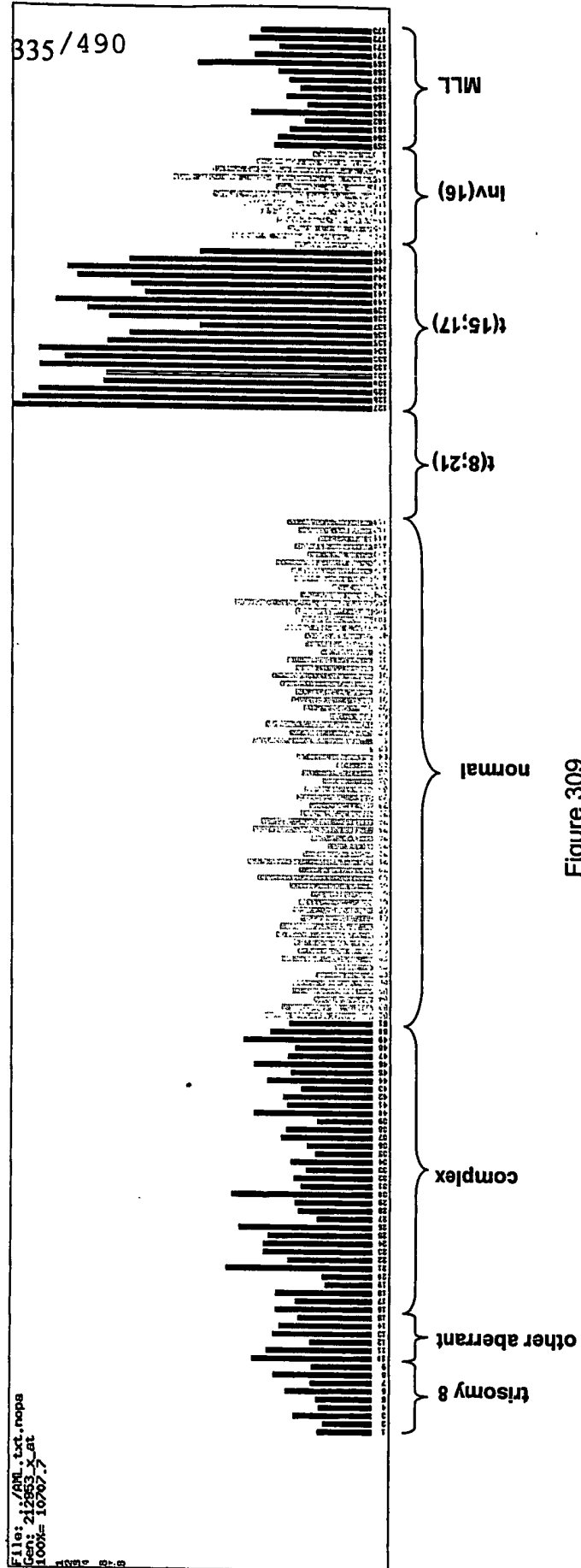
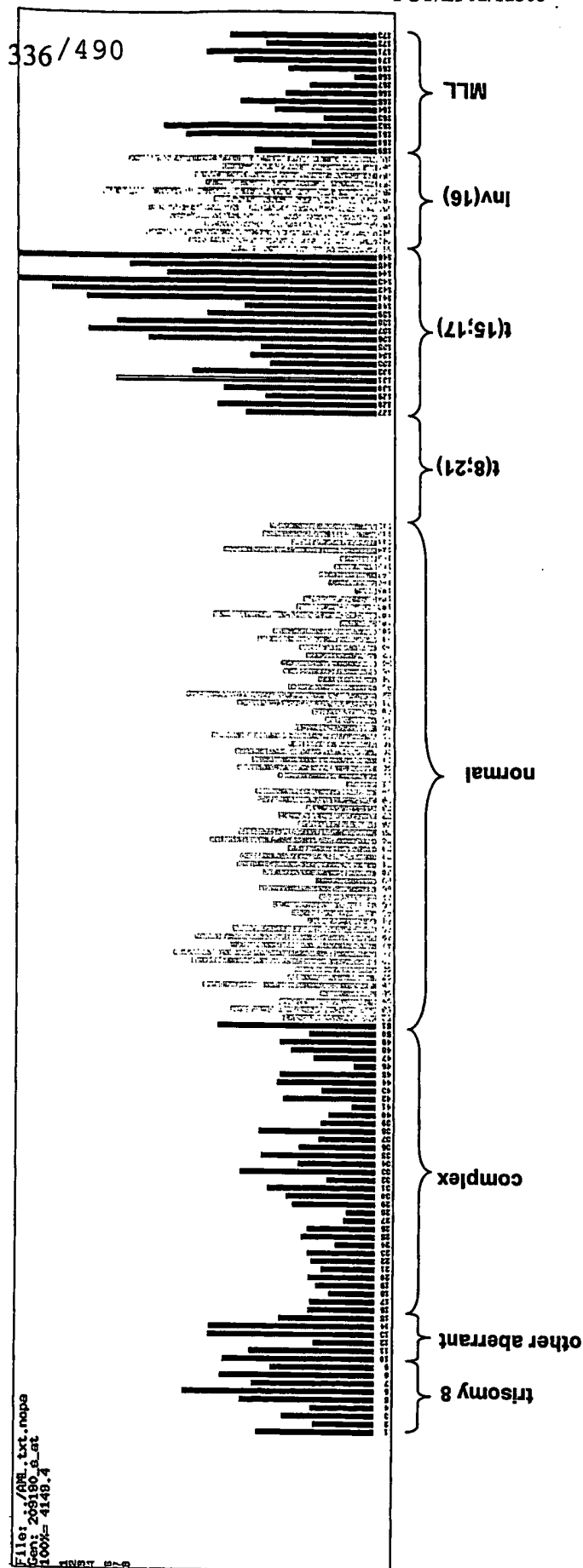


Figure 309

# 209190\_s\_at, DIAPH1, complex vs. inv(16)

Figure 310



201497\_x\_at, MYH11, complex vs. inv(16)

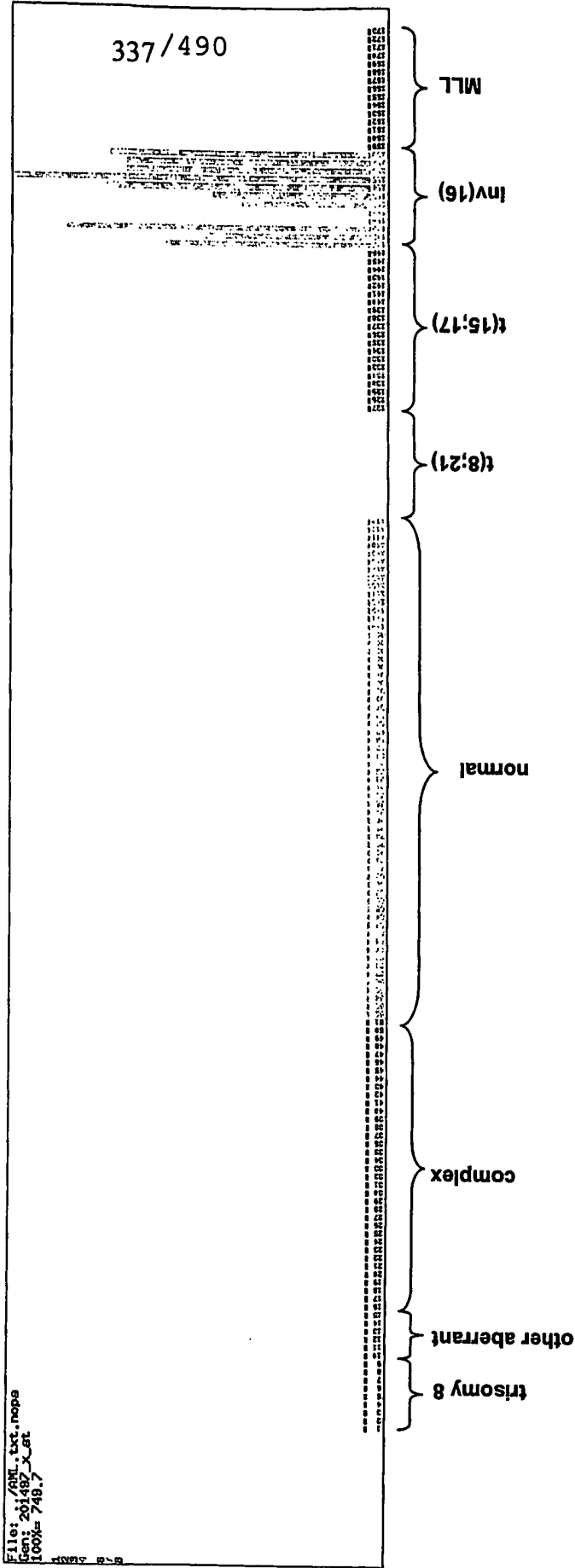
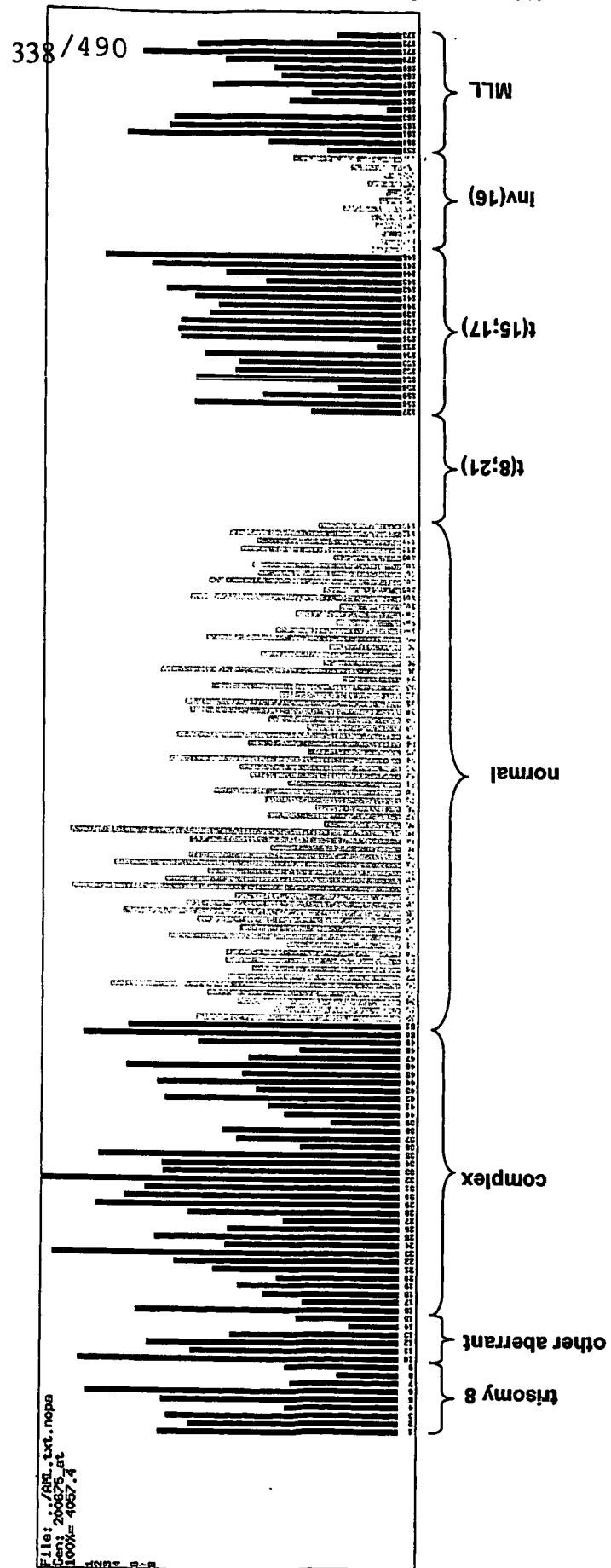


Figure 311

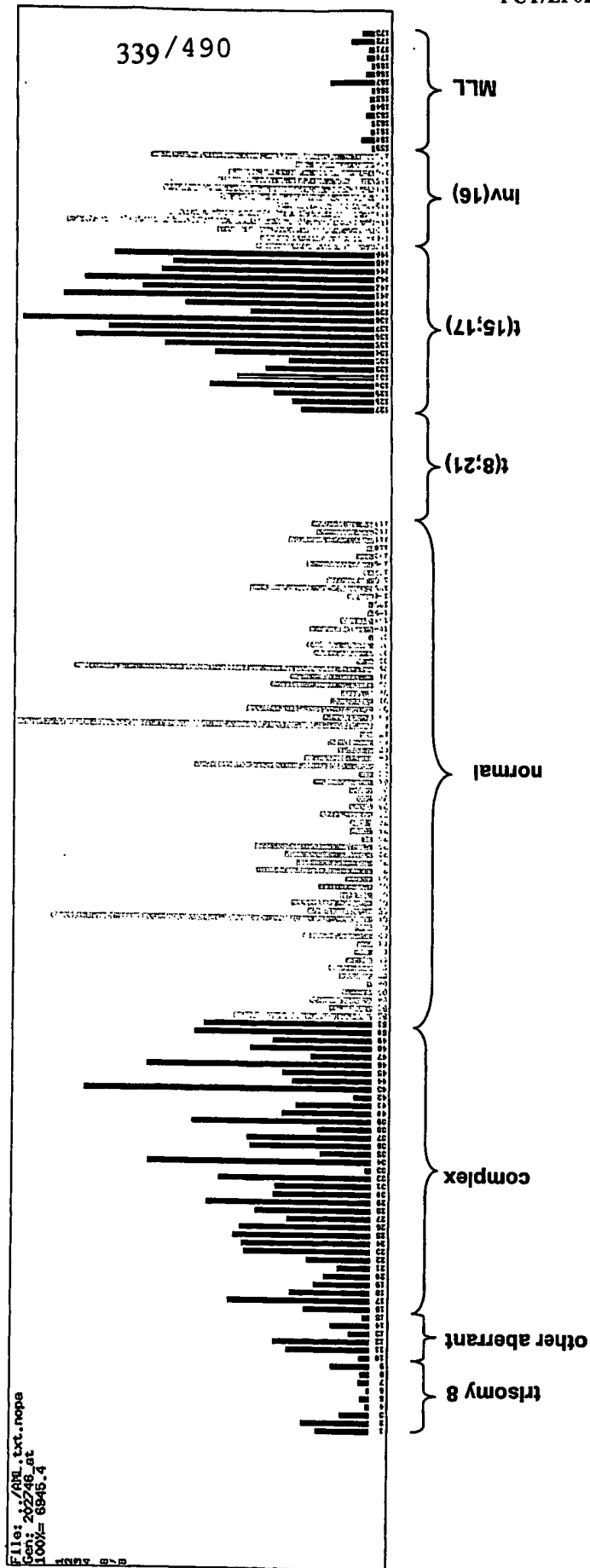
# 200675\_at, CD81, complex vs. inv(16)

Figure 312



# 202746\_at, complex vs. MLL

Figure 313



204951\_at, ARHH, complex vs. MLL

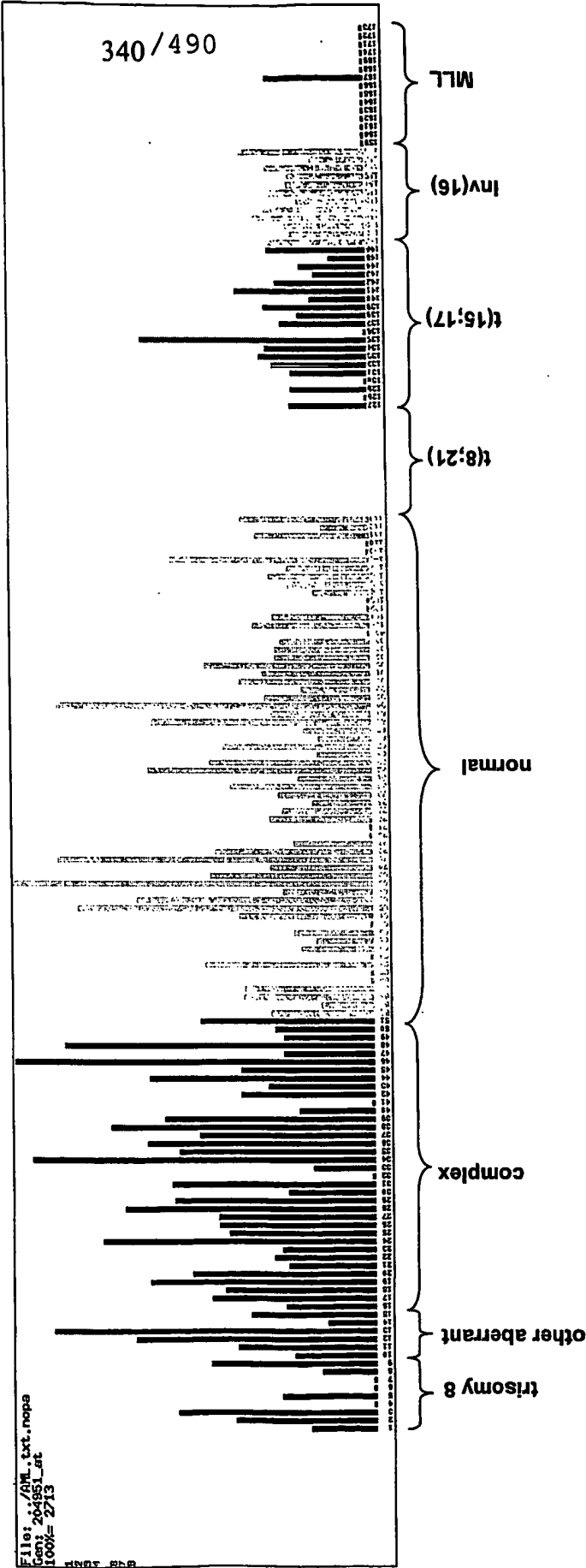


Figure 314



# 236892\_s\_at, HOXB6, normal vs. all other AML

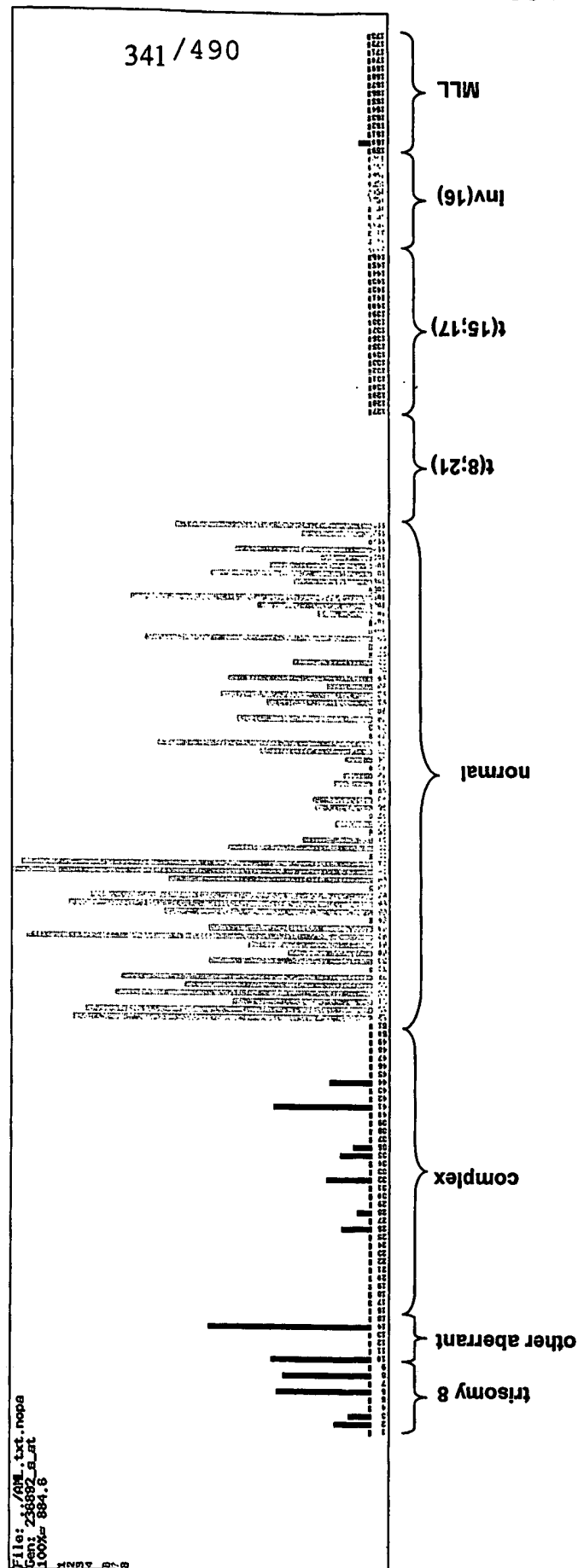


Figure 315

228904\_at, normal vs. all other AML

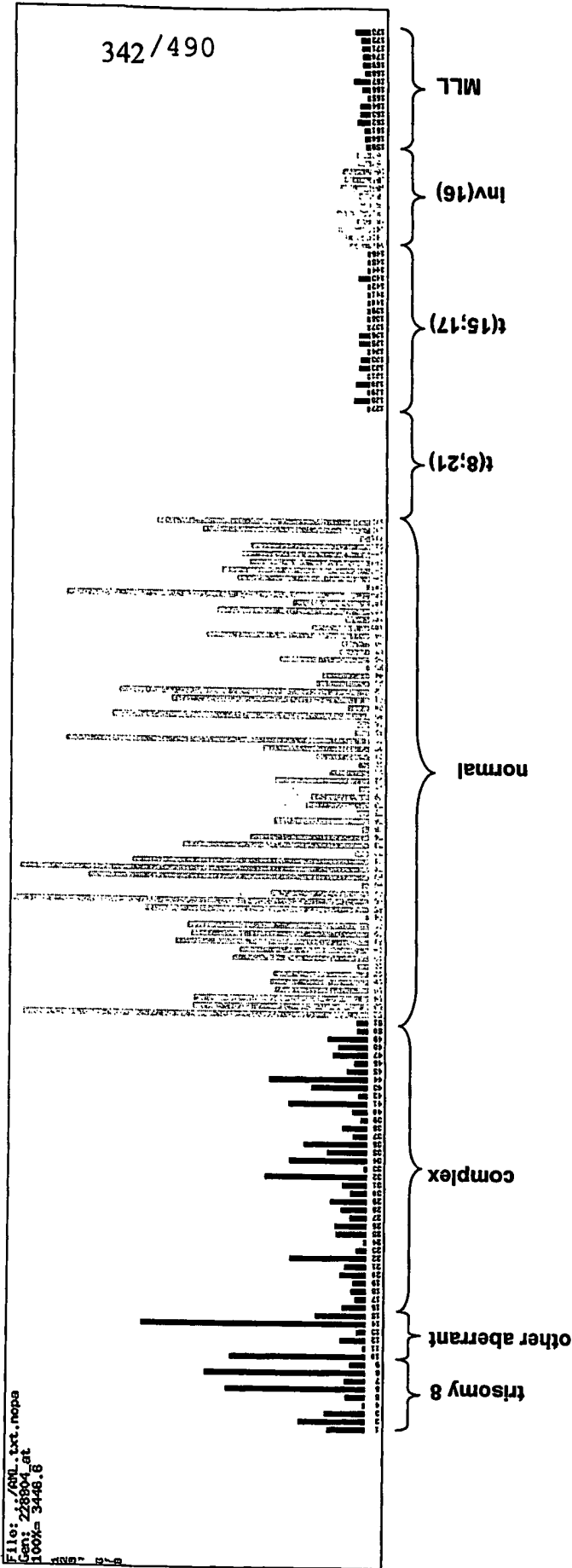
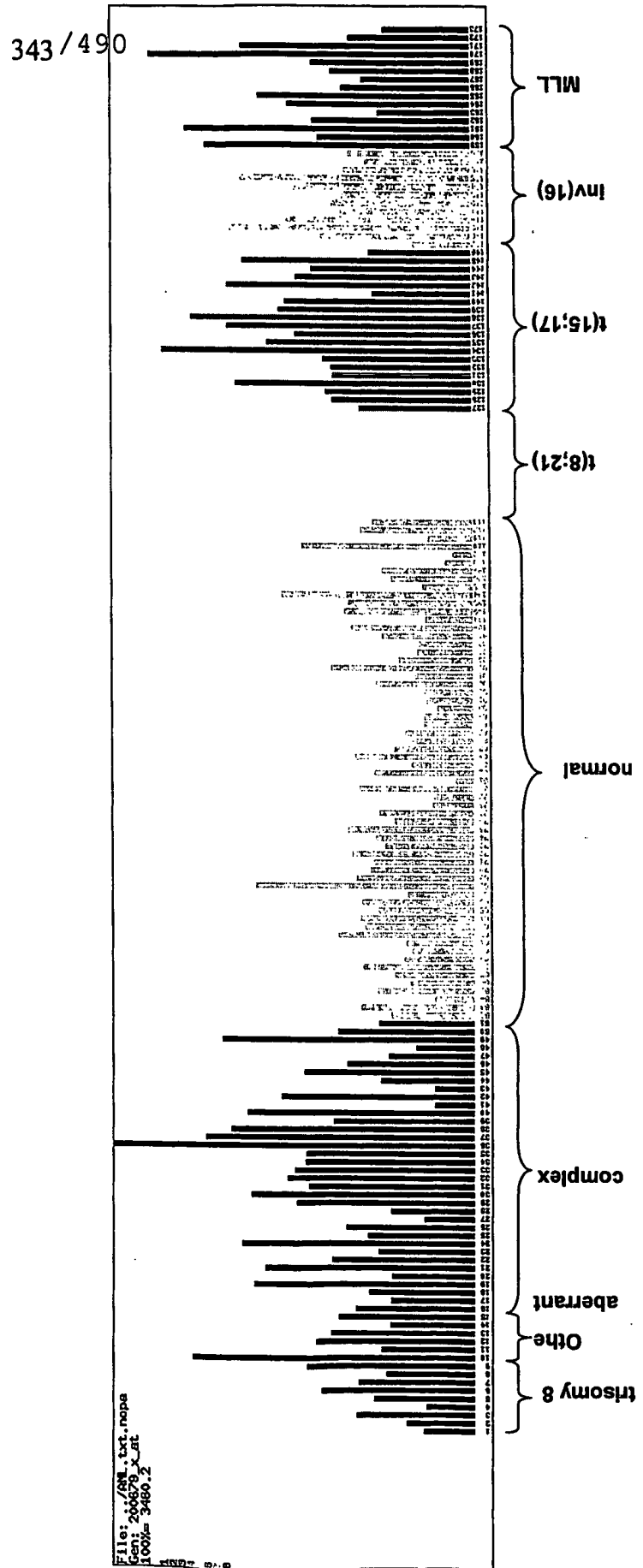


Figure 316

# 200679\_x\_at, HMG1, normal vs. all other AML

Figure 317



225326\_at, KIAA1311, normal vs. all other AML

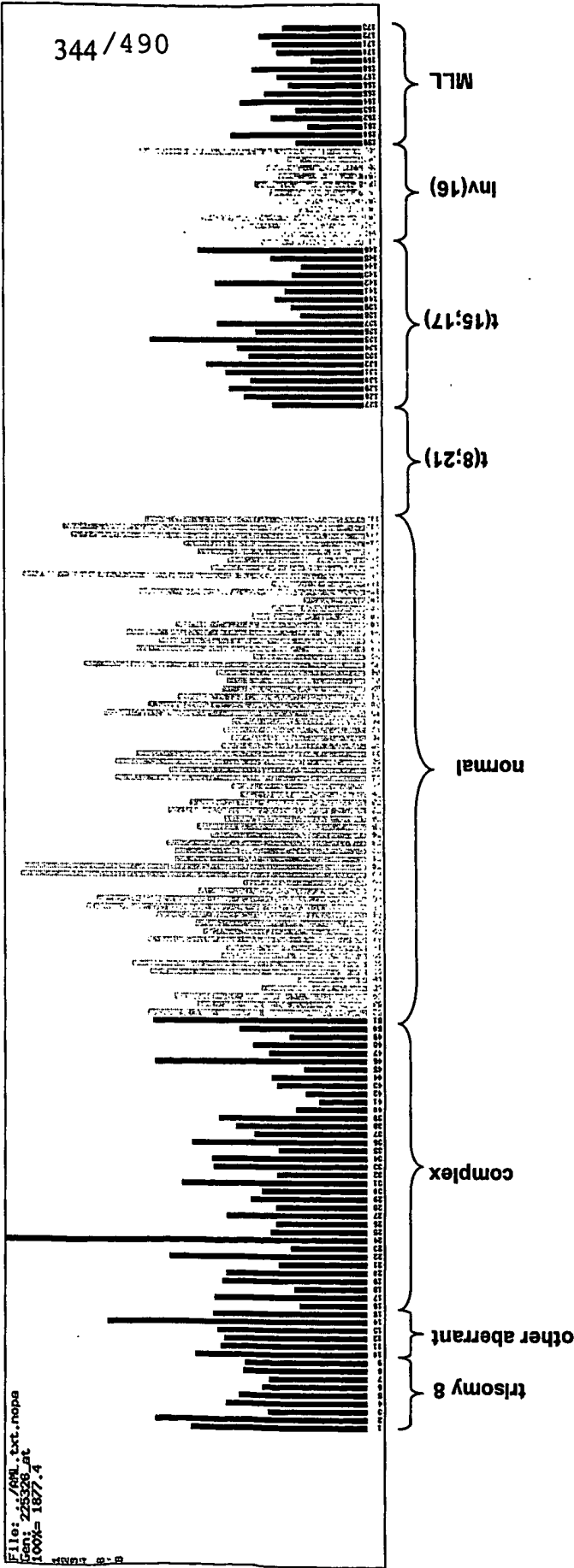


Figure 318

# 228827\_at, normal vs. t(8;21)

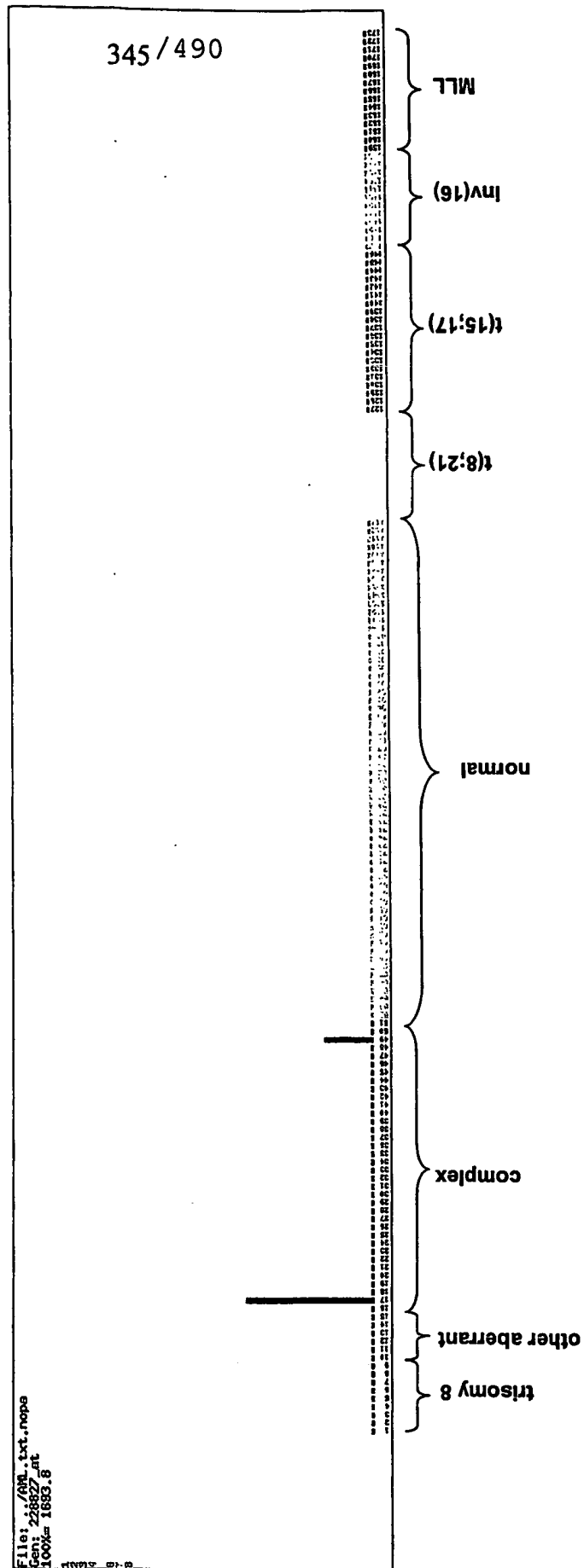


Figure 319

# 212953\_x\_at, CALR, normal vs. t(15;17)

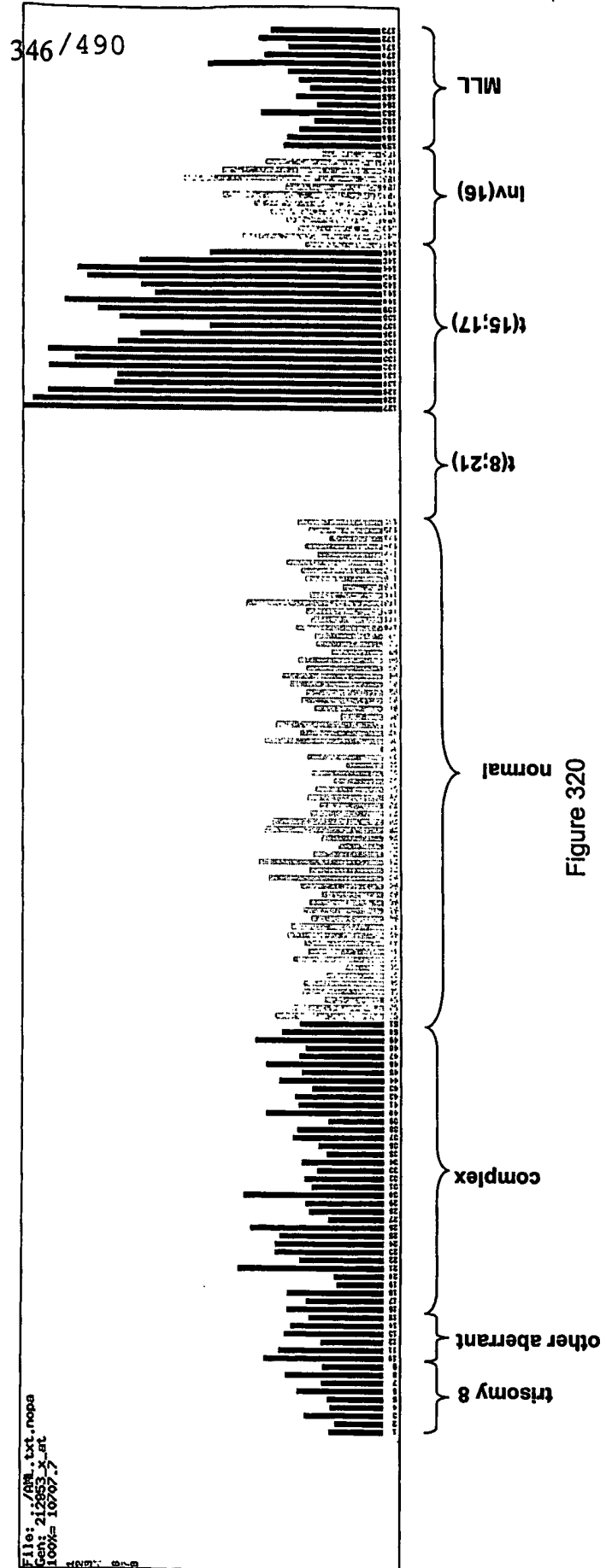


Figure 320

# 209365\_s\_at, ECM1, normal vs. inv(16)

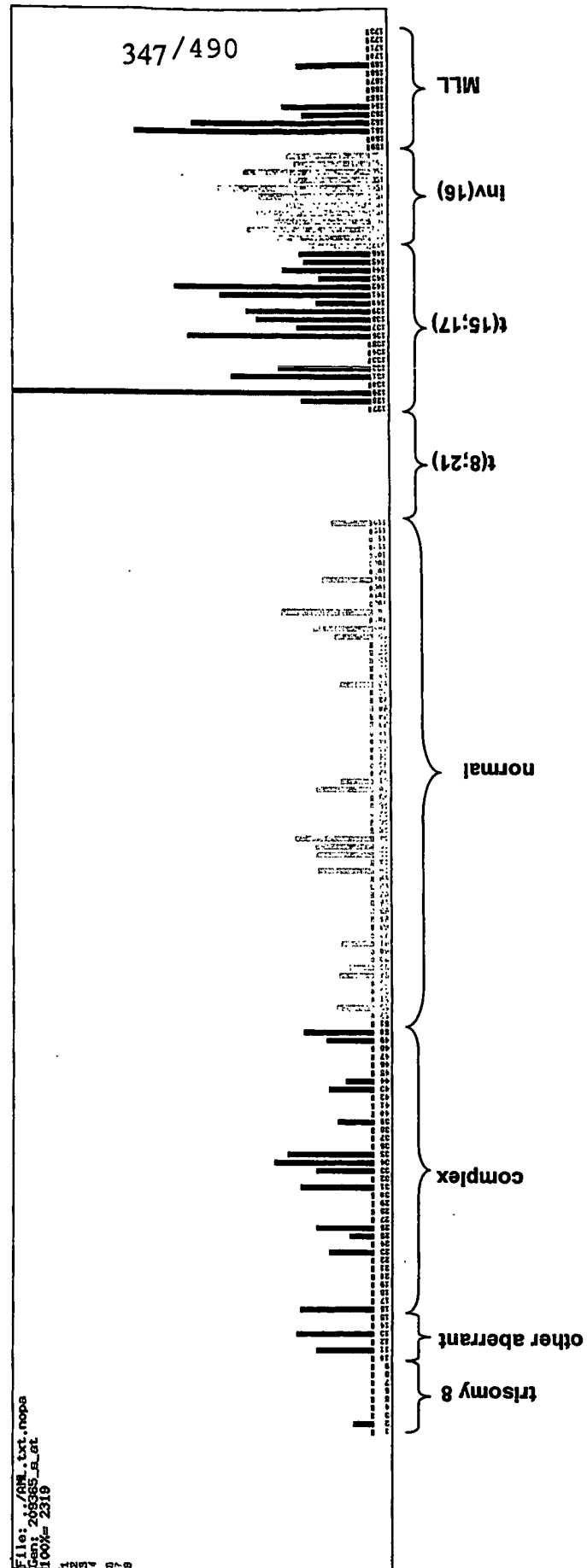


Figure 321

# 231310\_at, normal vs. inv(16)

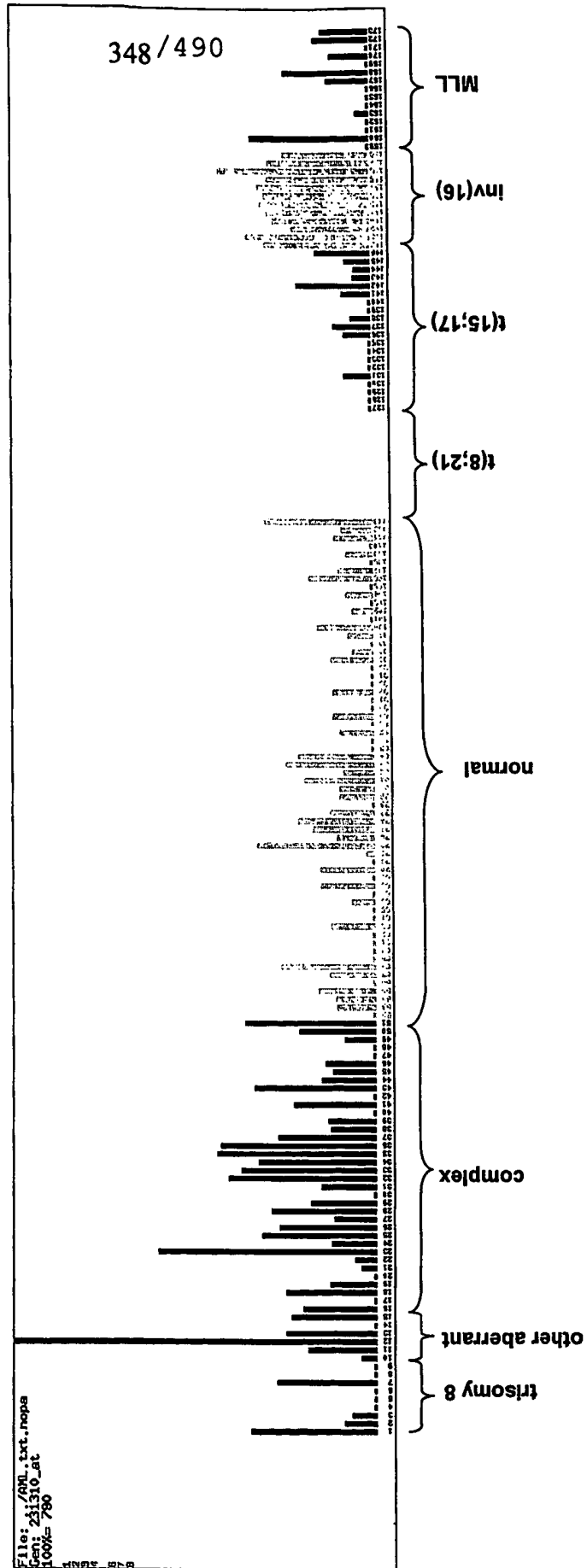


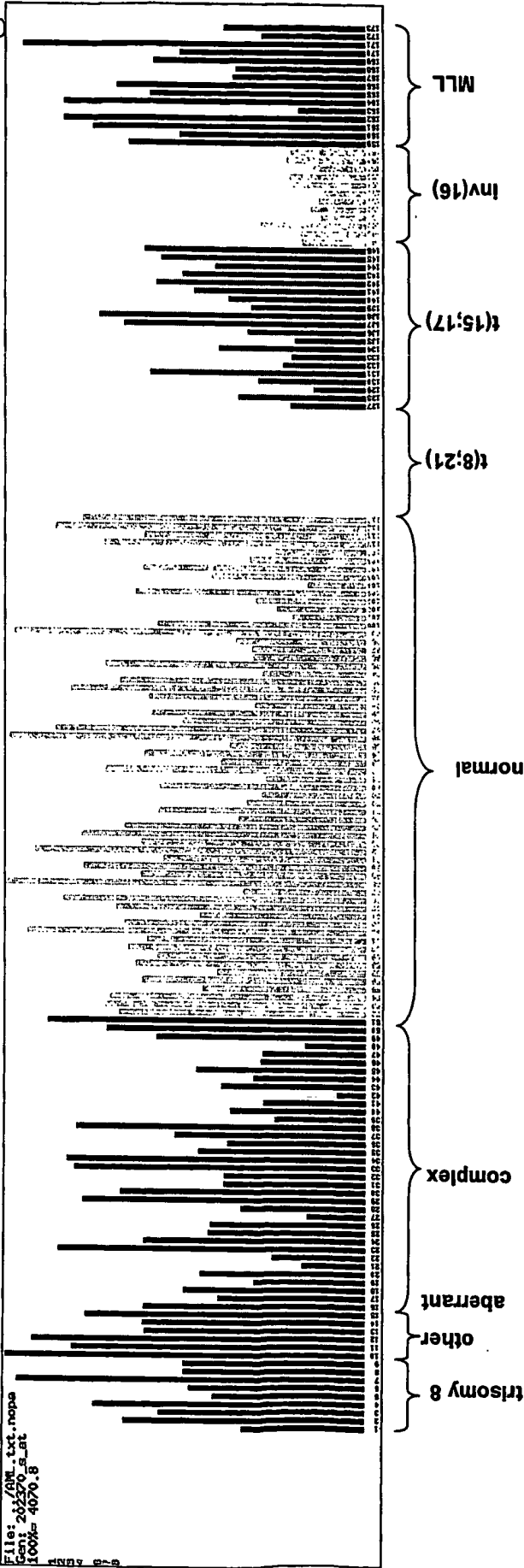
Figure 322



202370\_s\_at, CBFB, normal vs. inv(16)

Figure 323

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# 205453\_at, HOXB2, normal vs. MLL

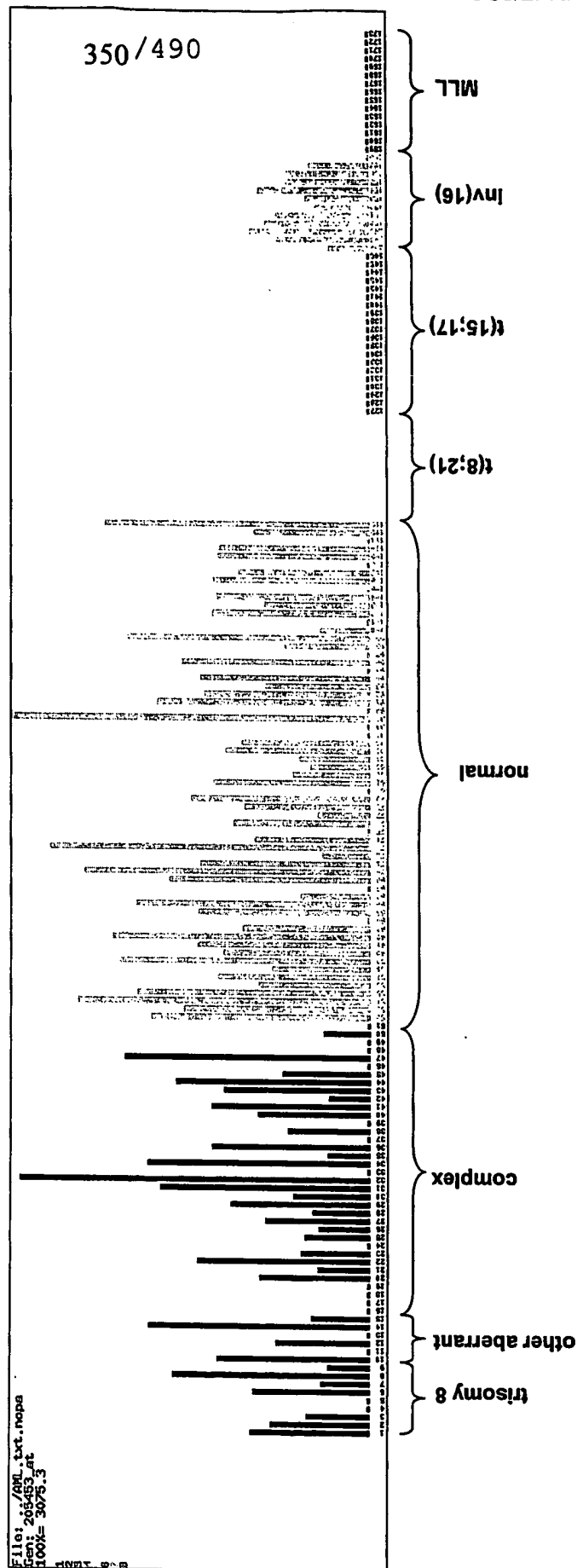


Figure 324

225406\_at, TSG, normal vs. MLL

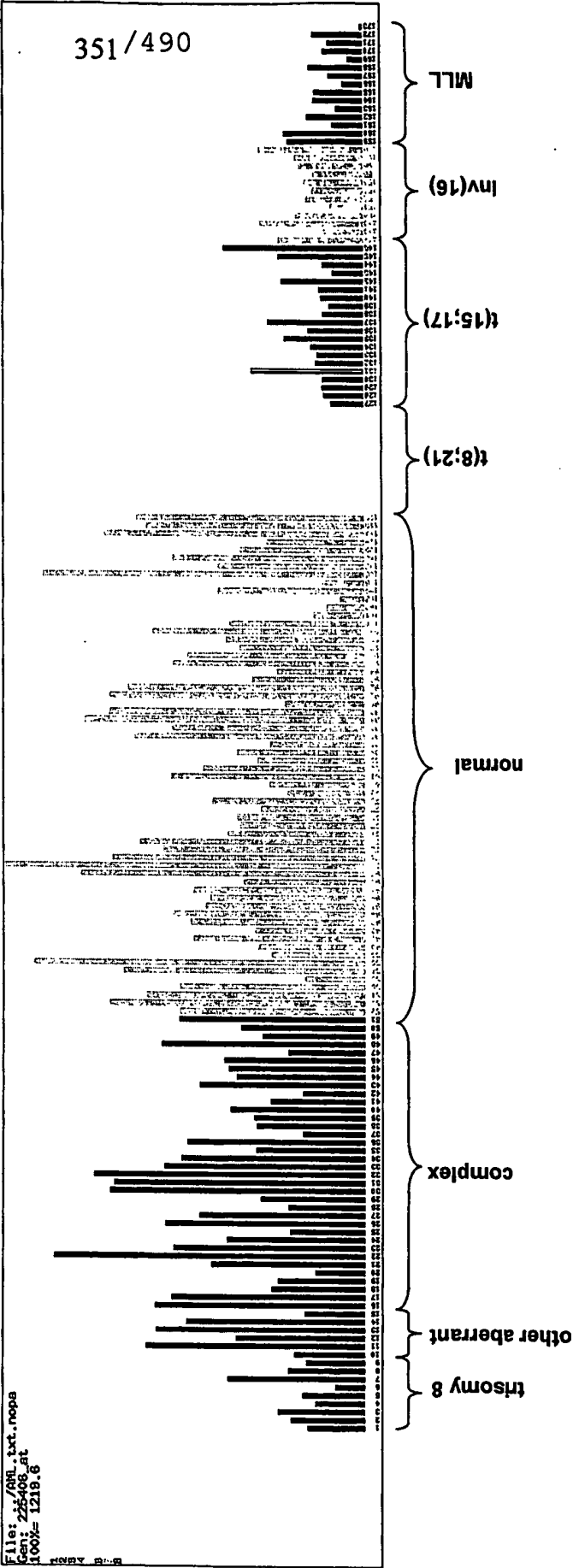


Figure 325

# 222464\_at, C15orf15, normal vs. MLL

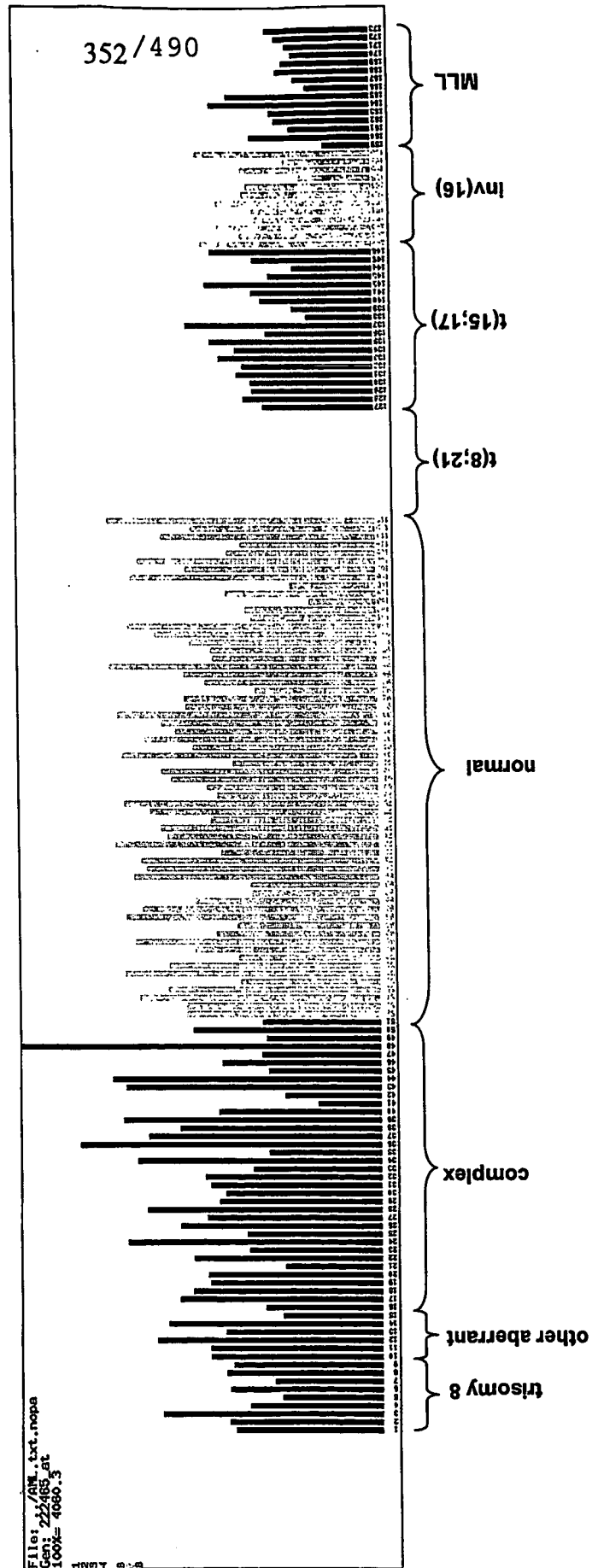


Figure 326

205529\_s\_at, CBFA2T1, t(8;21) vs. all other AML

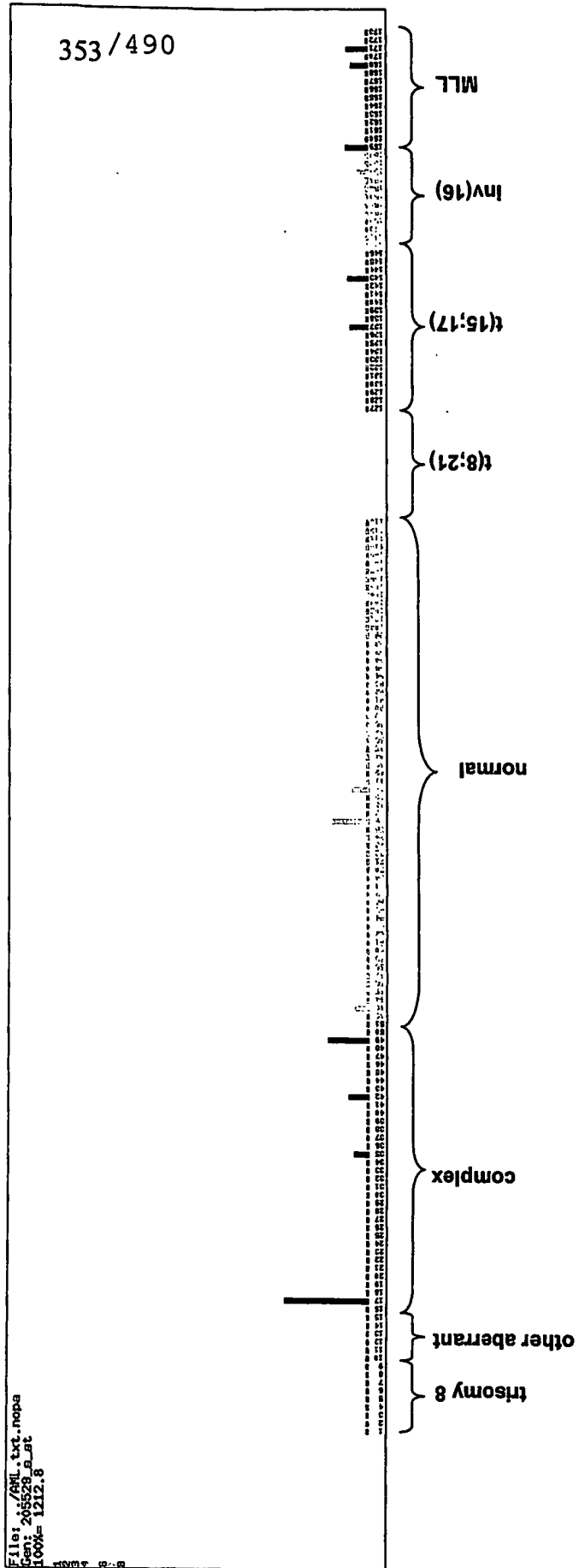


Figure 327

# 214450\_at, CTSW, t(8;21) vs. t(15;17)

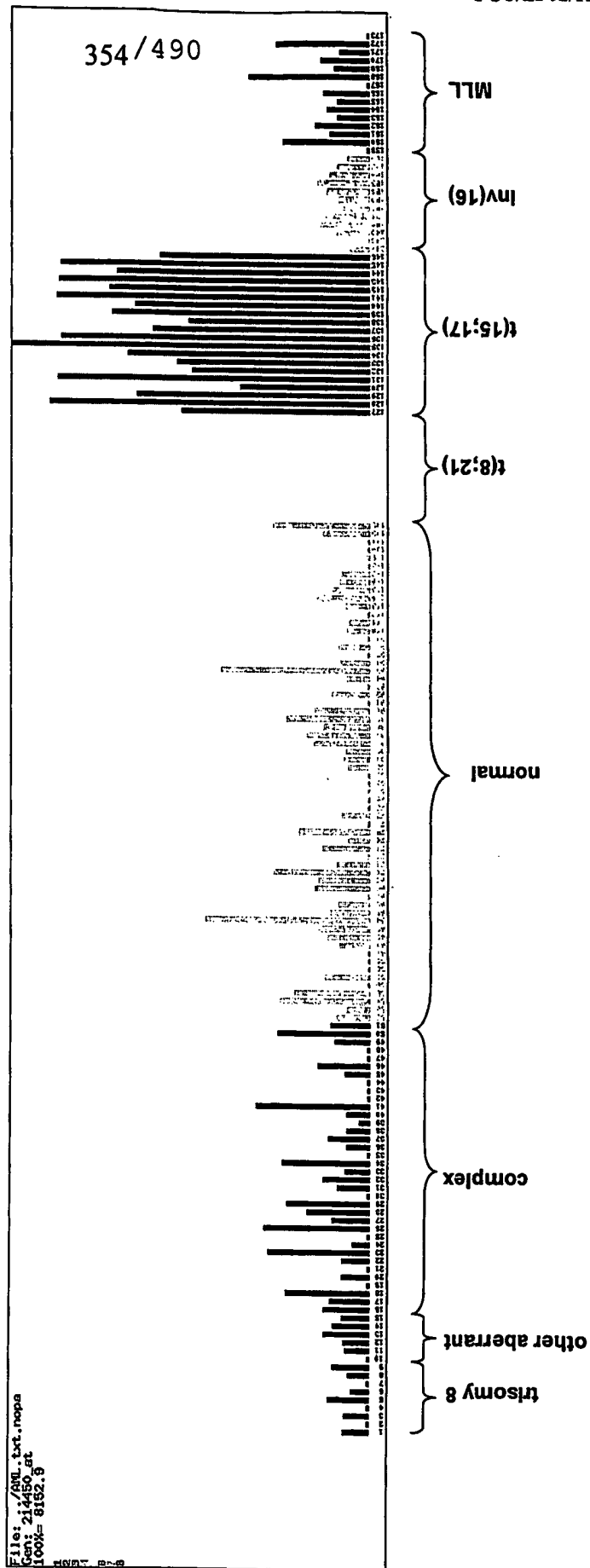


Figure 328

233138\_at, t(8;21) vs. inv(16)

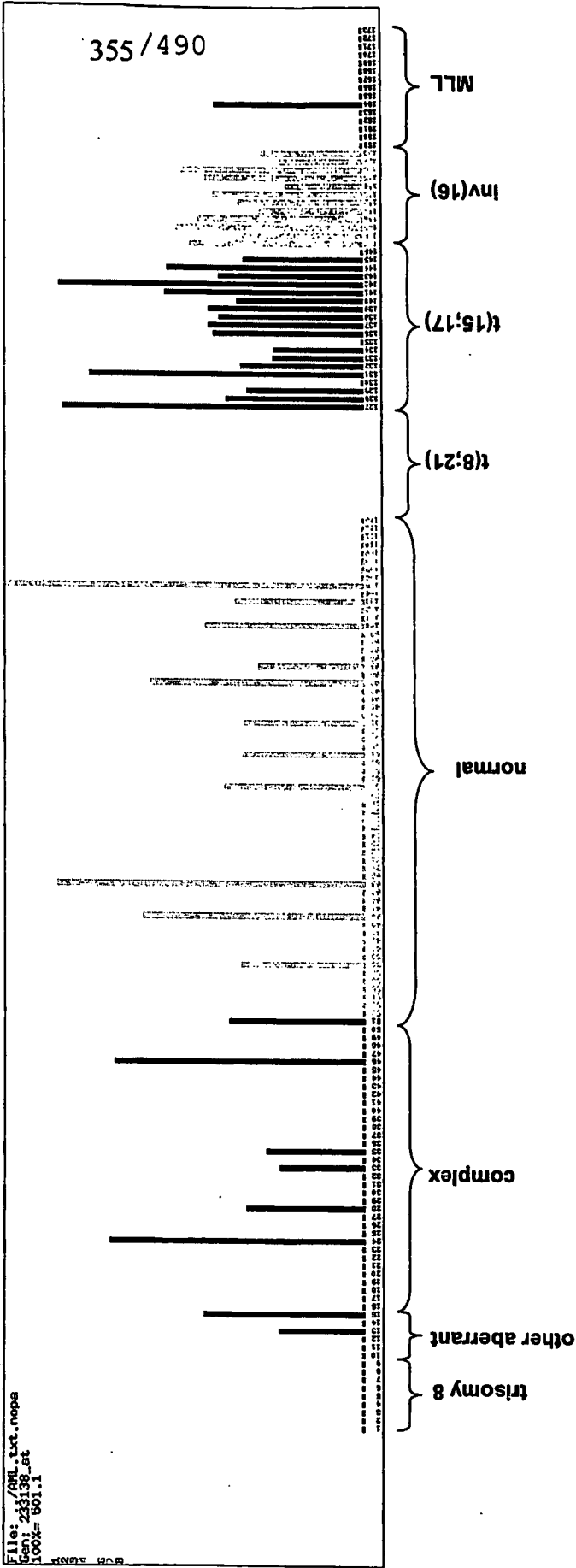
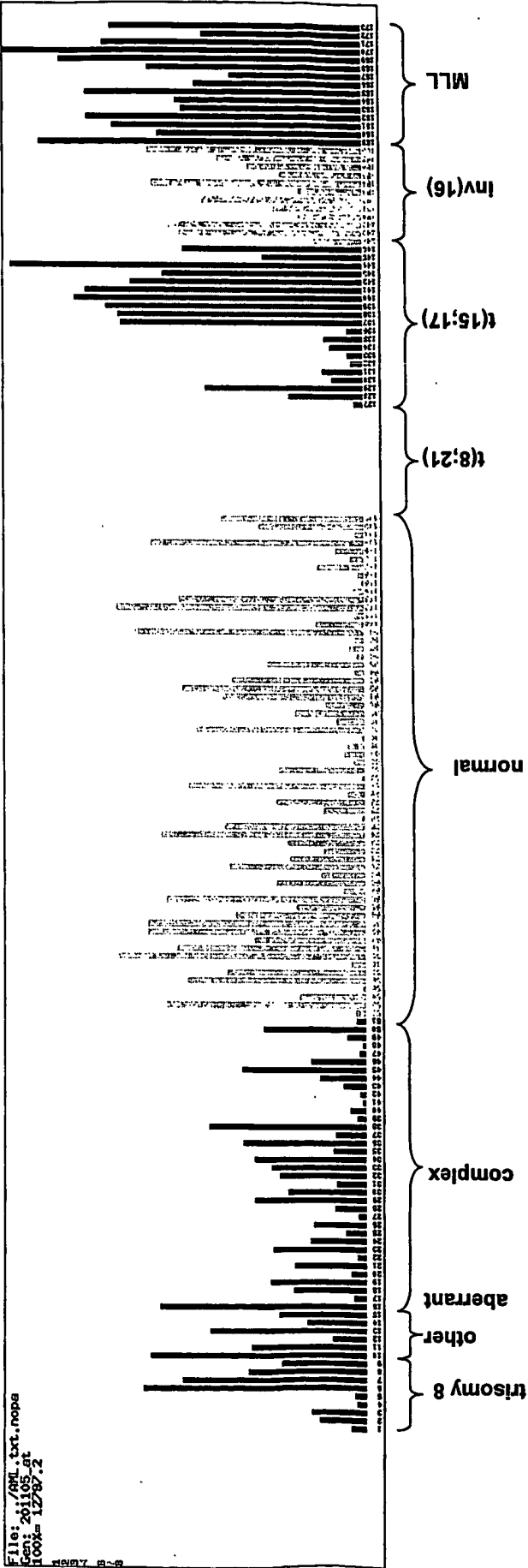


Figure 329

201105\_at, LGALS1, t(8;21) vs. MLL

Figure 330

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203948\_s\_at, MPO, t(15;17) vs. all other AML

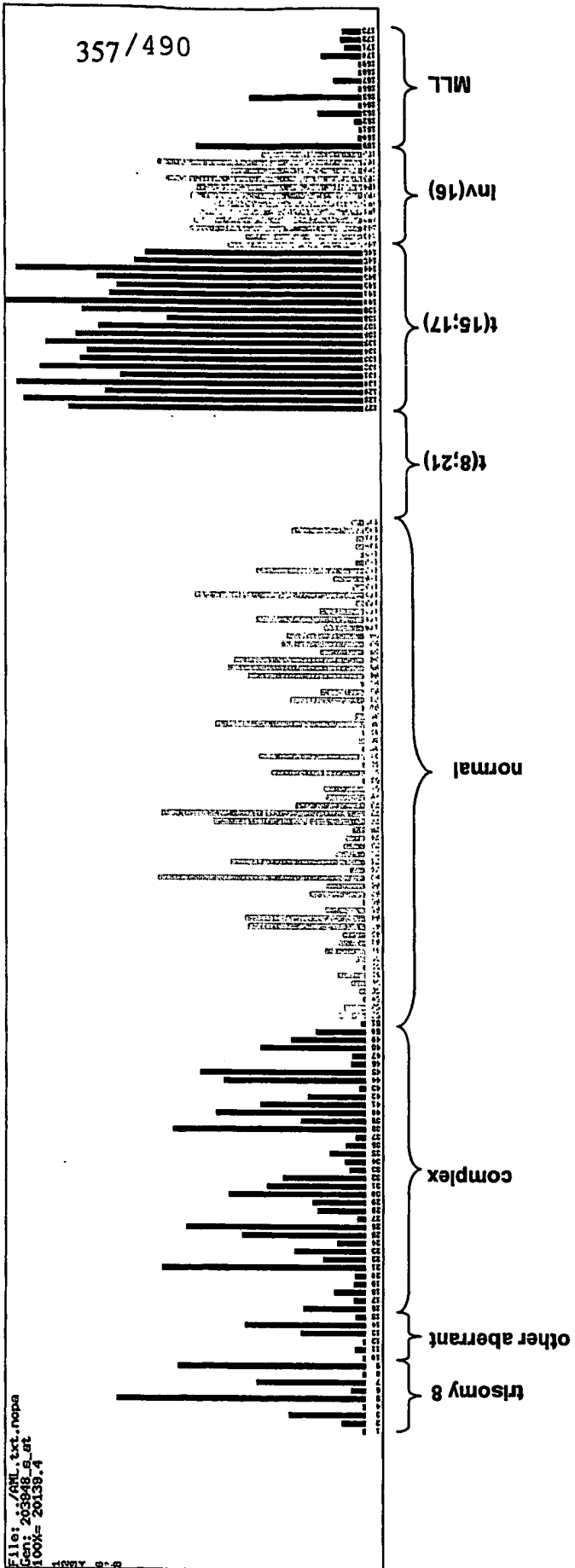
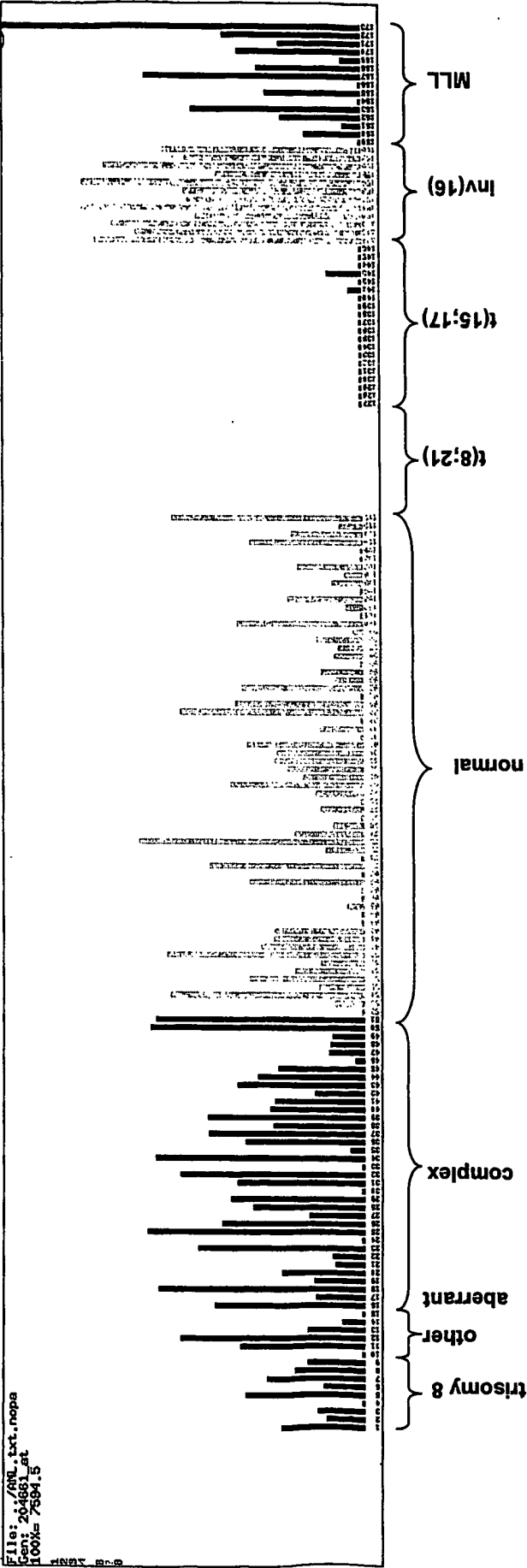


Figure 331

204661\_at, CDW52, t(15;17) vs. inv(16)

Figure 332

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205624\_at, CPA3, t(15;17) vs. MLL

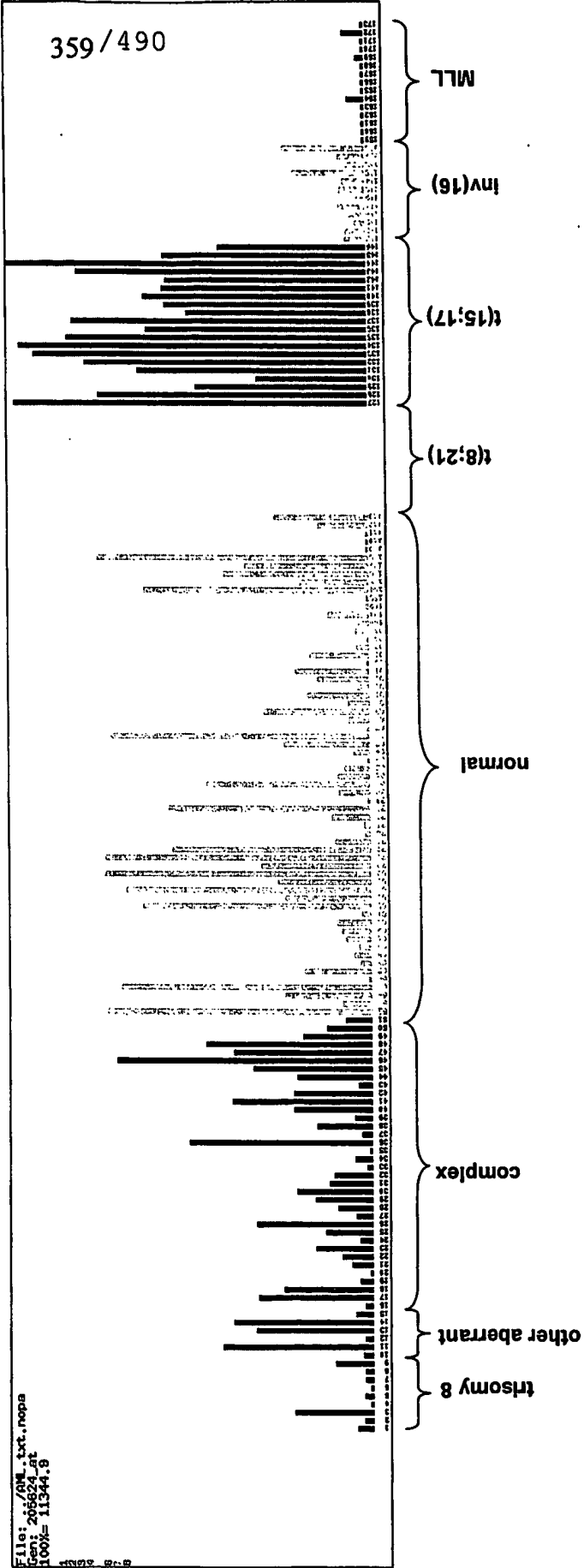


Figure 333

# 201497\_x\_at, MYH11, inv(16) vs. all other AML

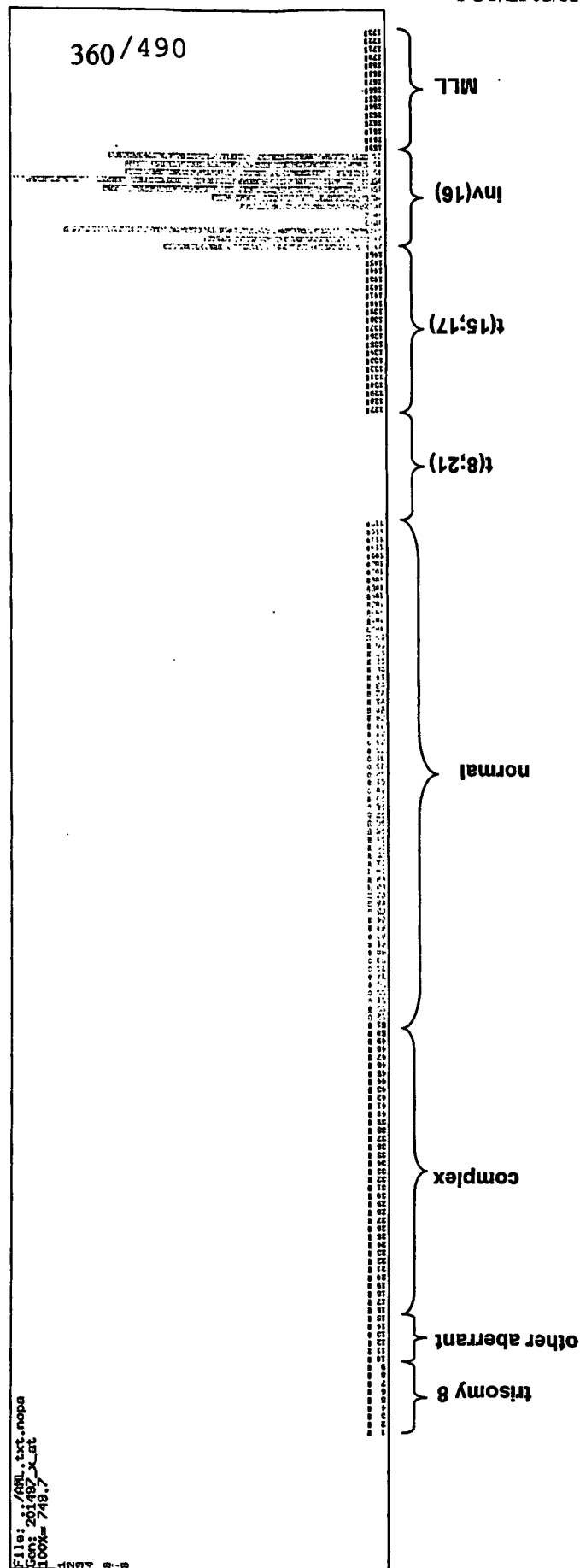


Figure 334

# 200951\_s\_at, CCND2, inv(16) vs. MLL

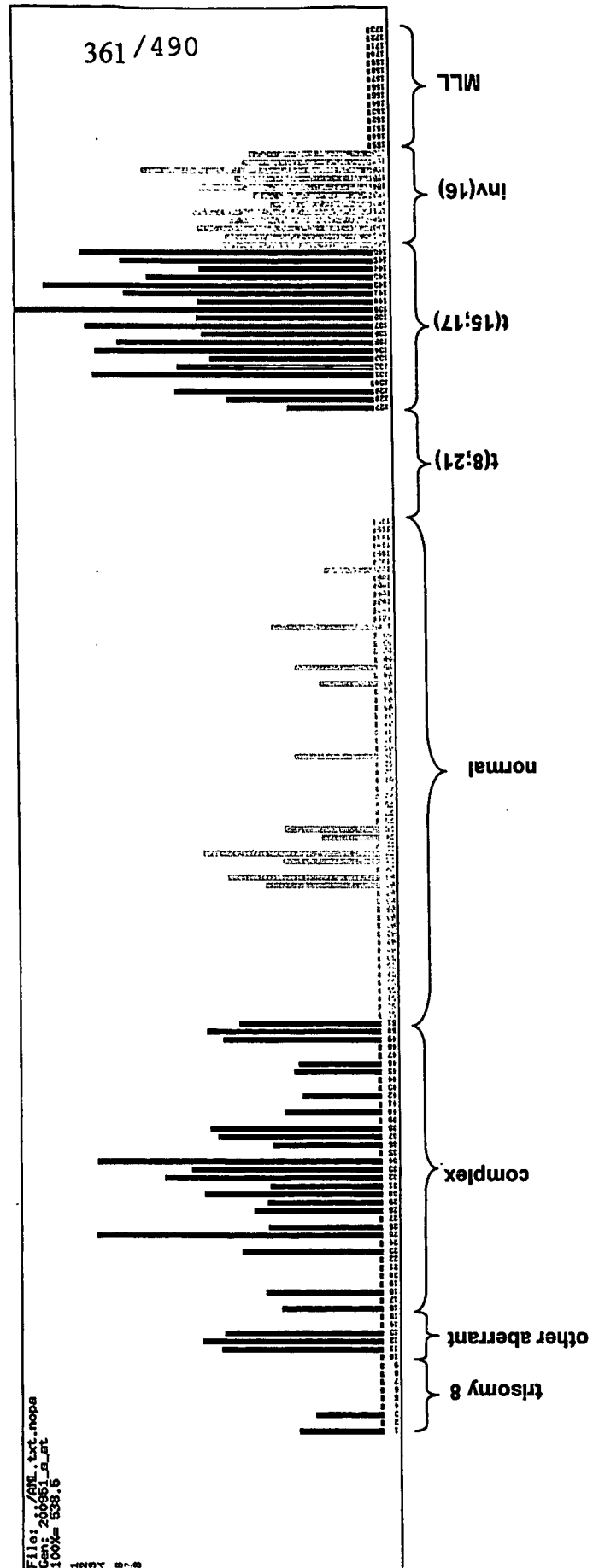
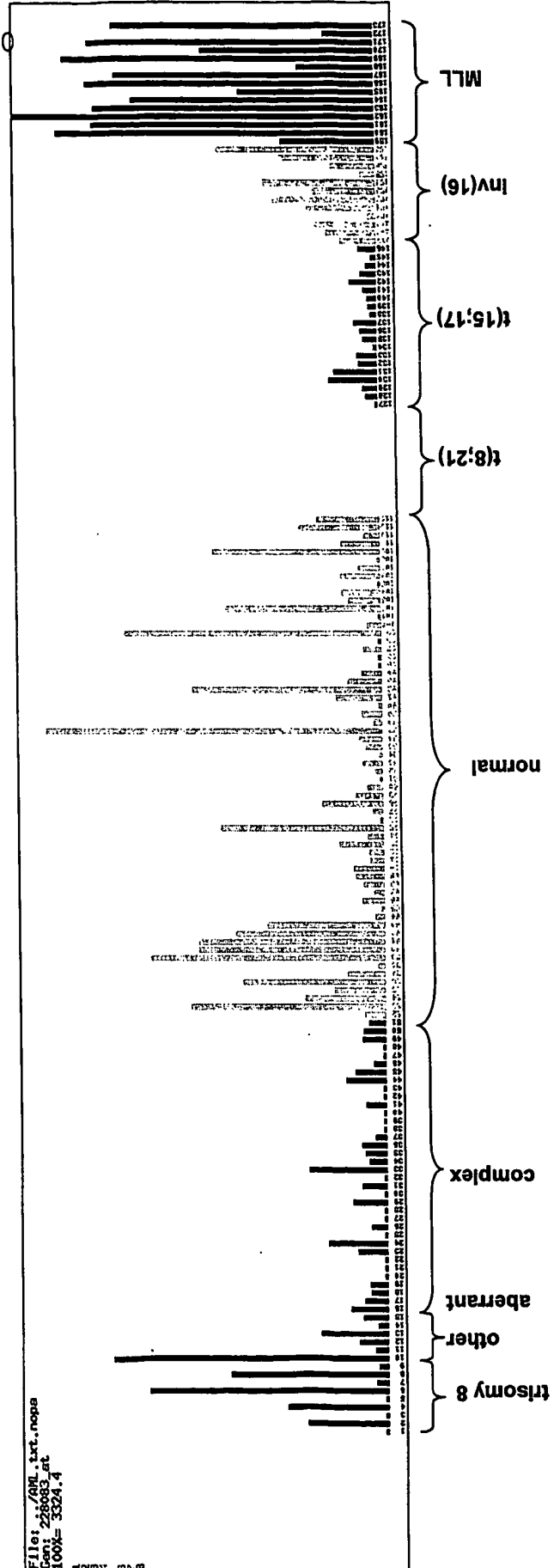


Figure 335

# 228083\_at, MLL vs. all other AML

Figure 336

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635\_s\_at, PPP2R5B, other low

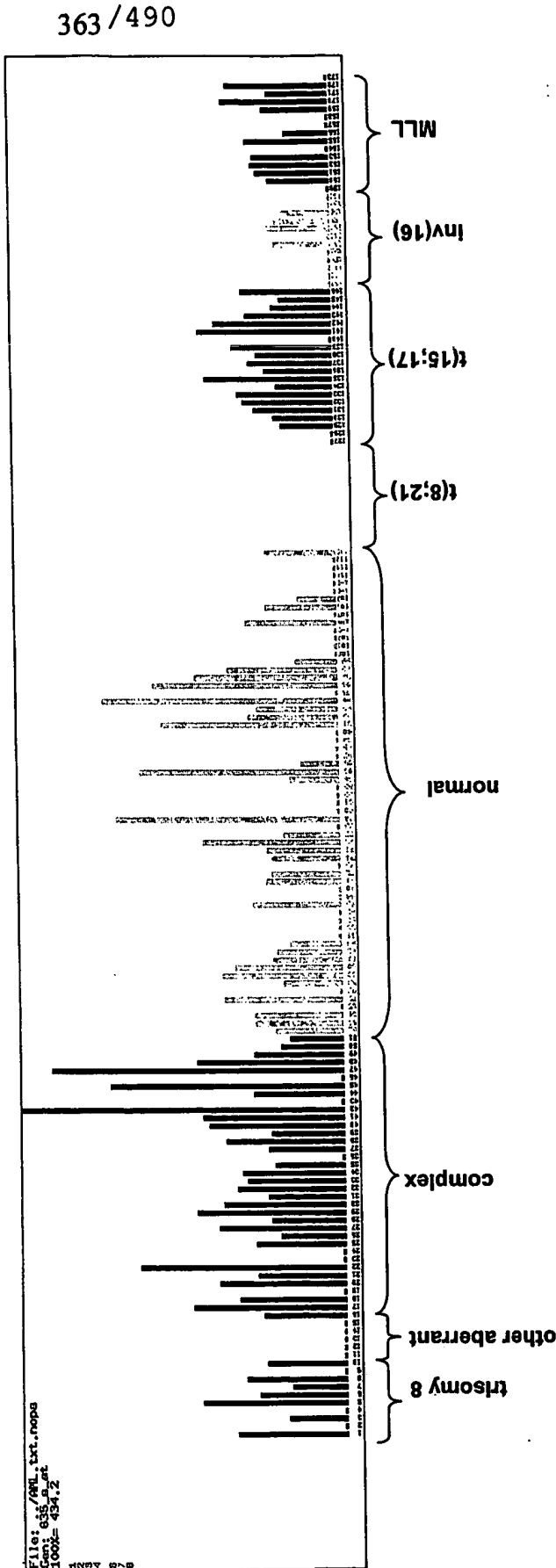


Figure 337

# 34210\_at, CDW52, AML t(15;17) low

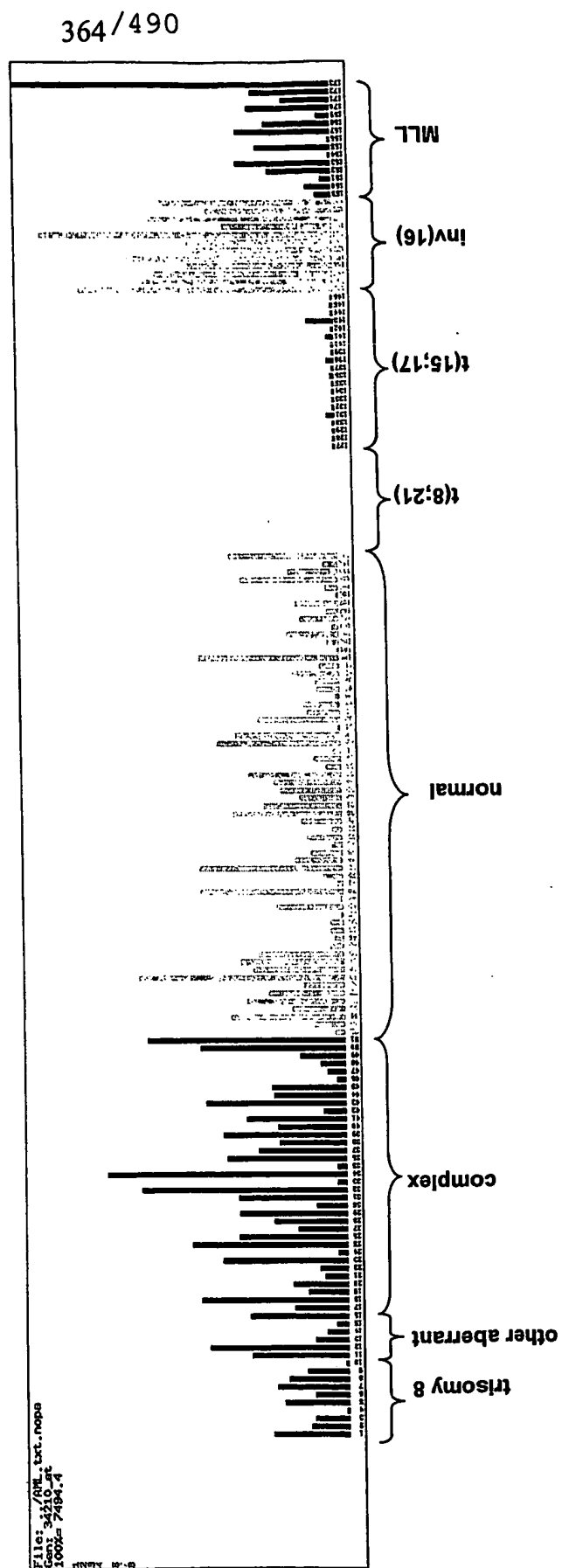


Figure 338



38487\_at, FLJ12442, AML t(15;17) high

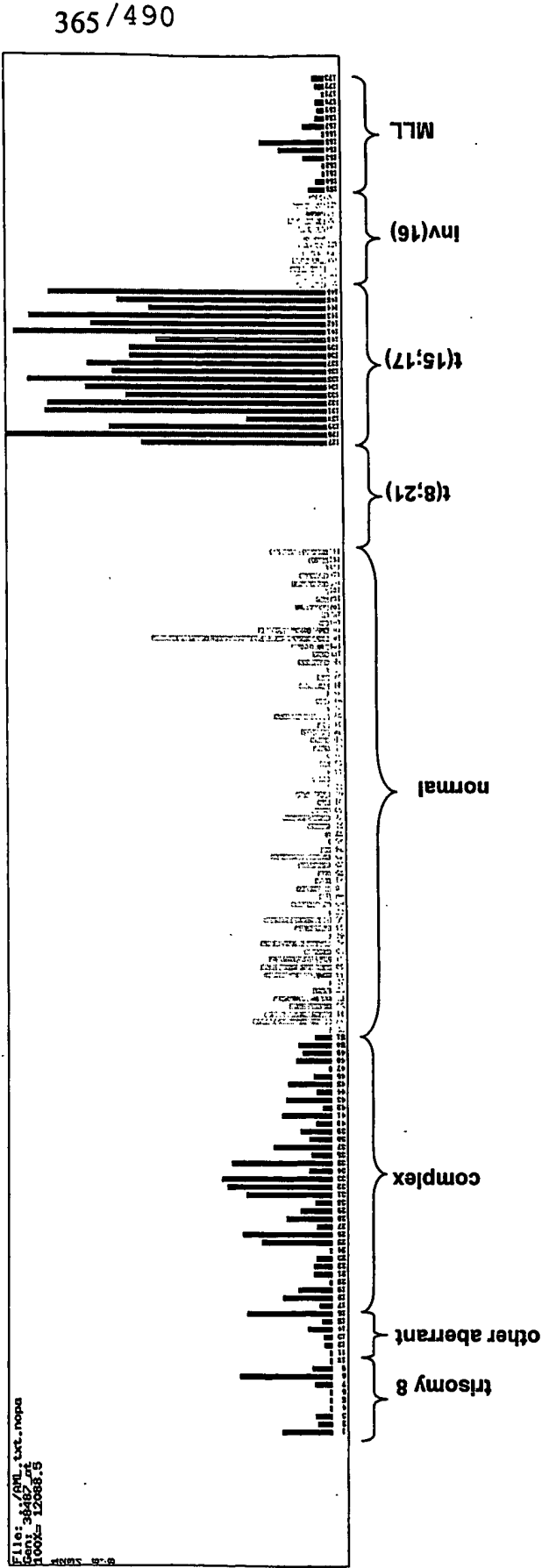


Figure 339

# 200675\_at, CD81, AML inv(16) low

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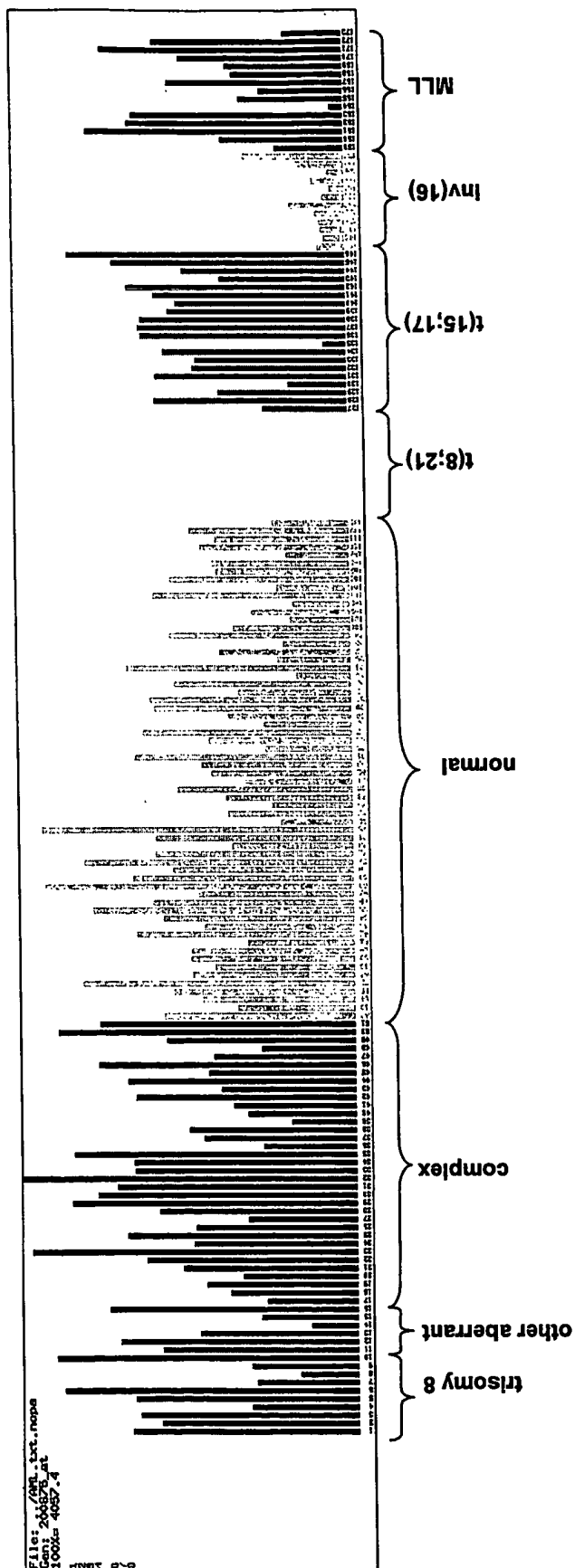


Figure 340

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201137\_s\_at, HLA-DPB1, AML t(15;17) low

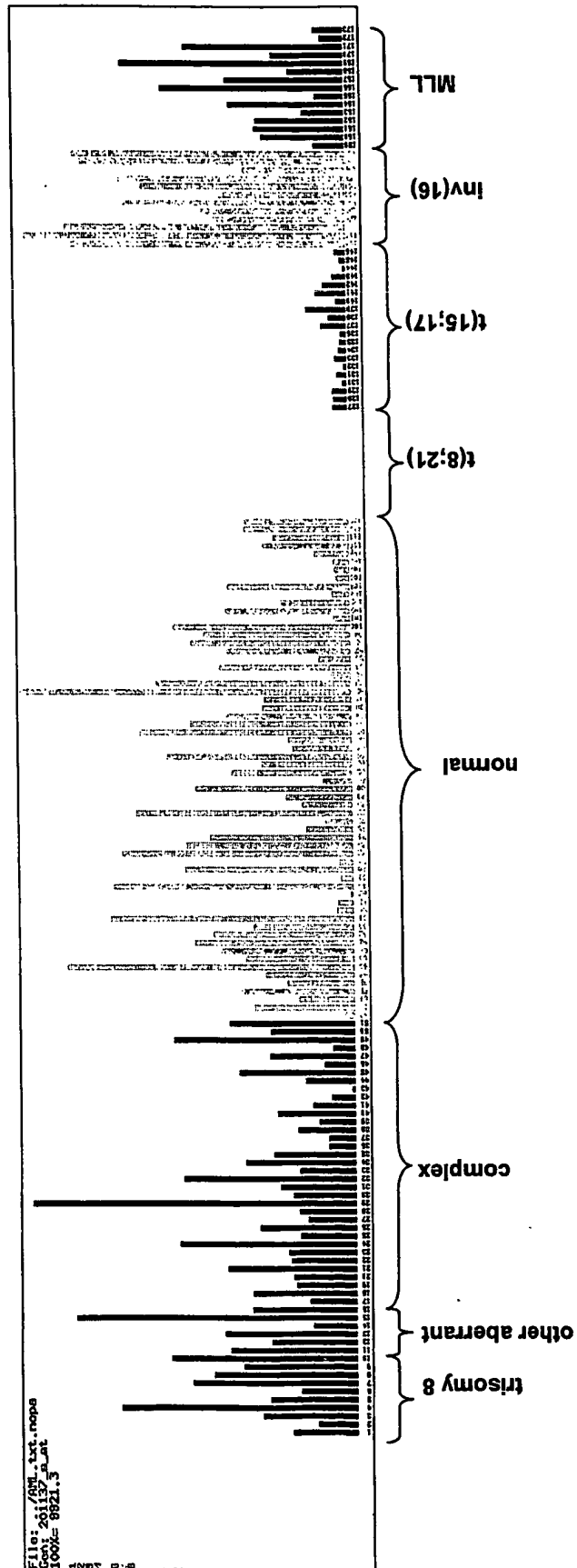


Figure 341

201425\_at, ALDH2, AML t(8;21) low

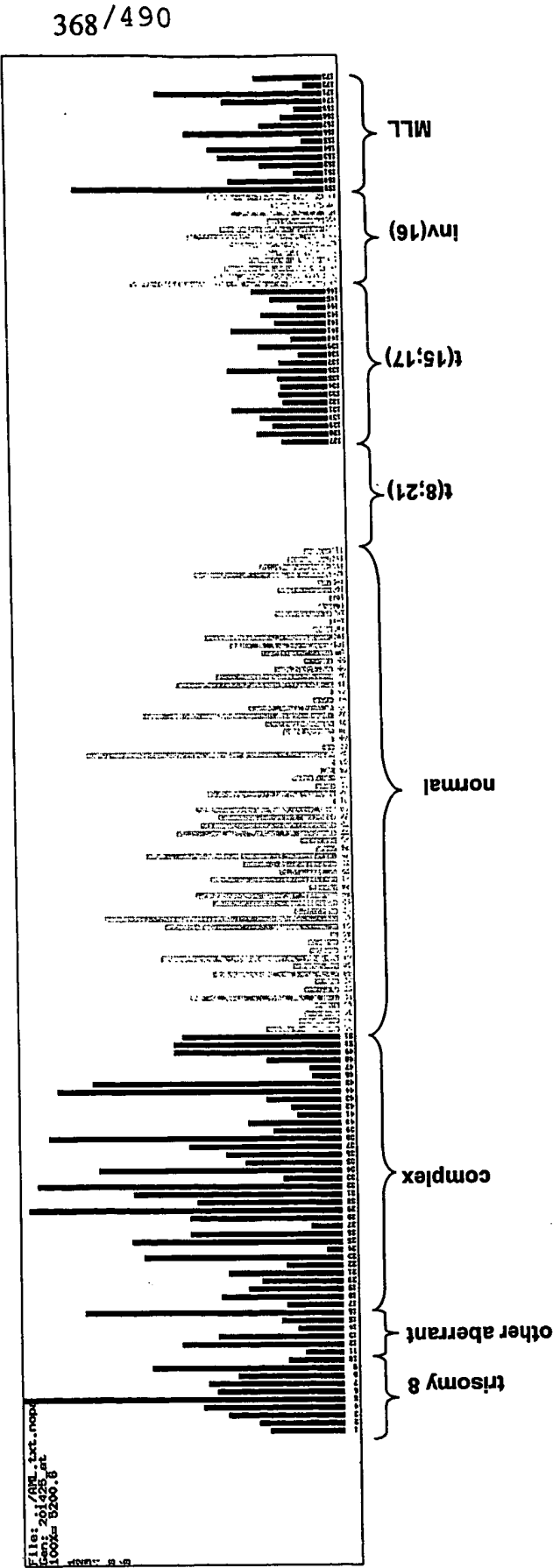


Figure 342

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201496\_x\_at, MYH11, AML inv(16) high

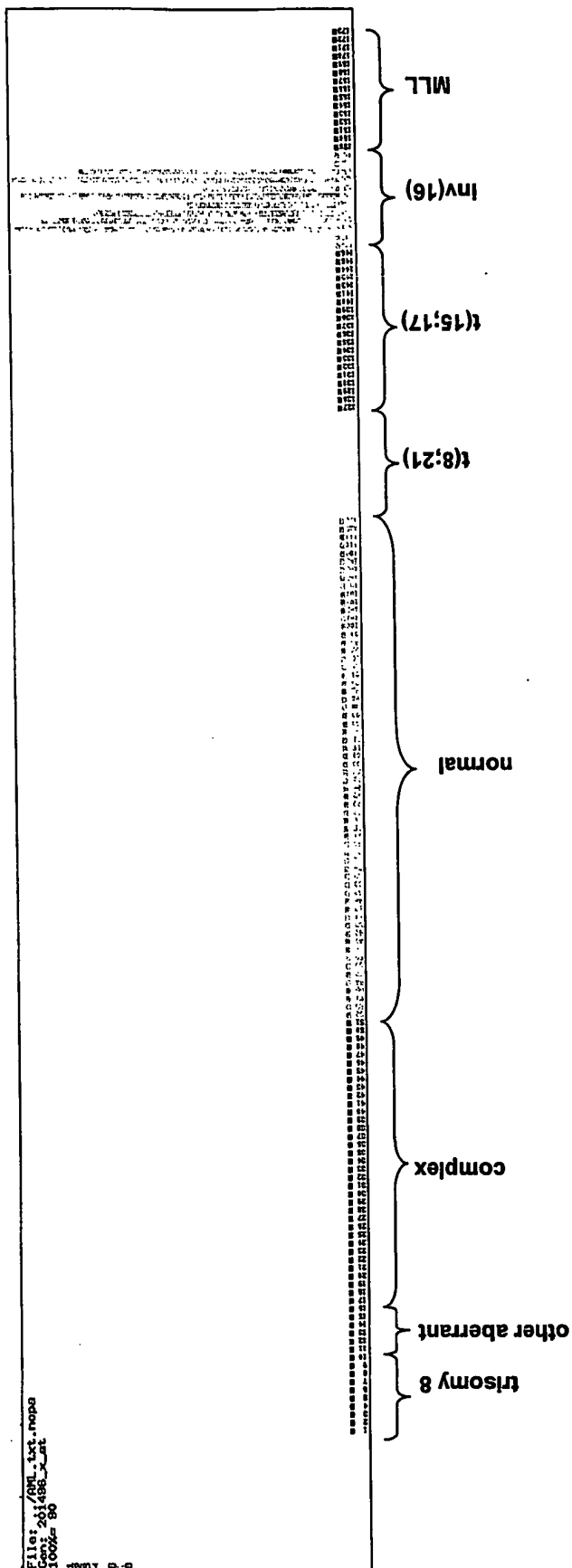


Figure 343

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201497\_x\_at, MYH11, AML inv(16) high

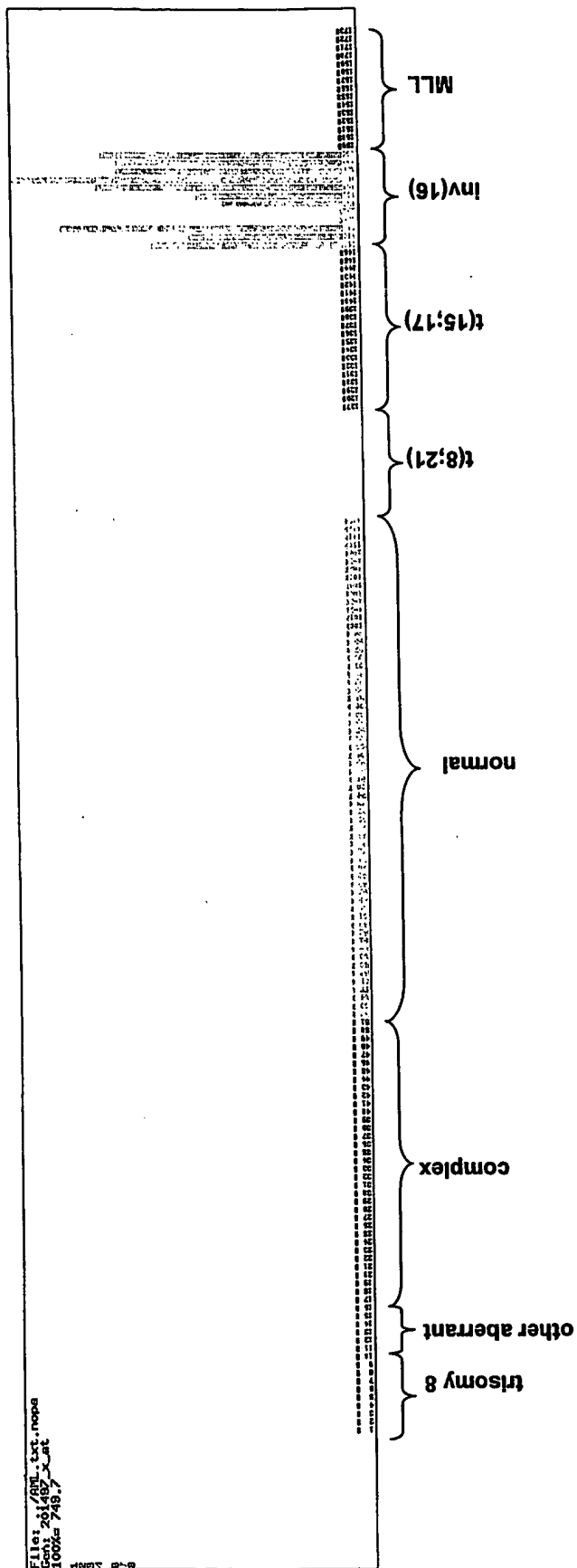


Figure 344

# 201596\_x\_at, KRT18, AML t(8;21) low

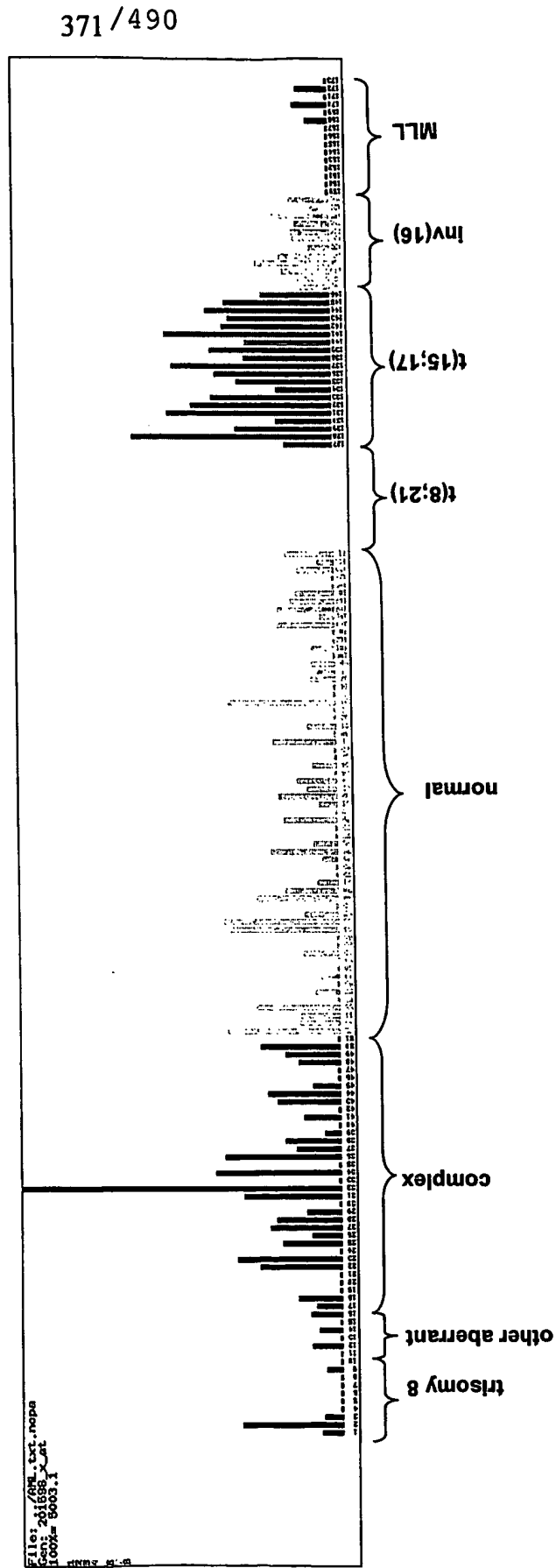


Figure 345

# 202085\_at, TJP2, AML inv(16) low

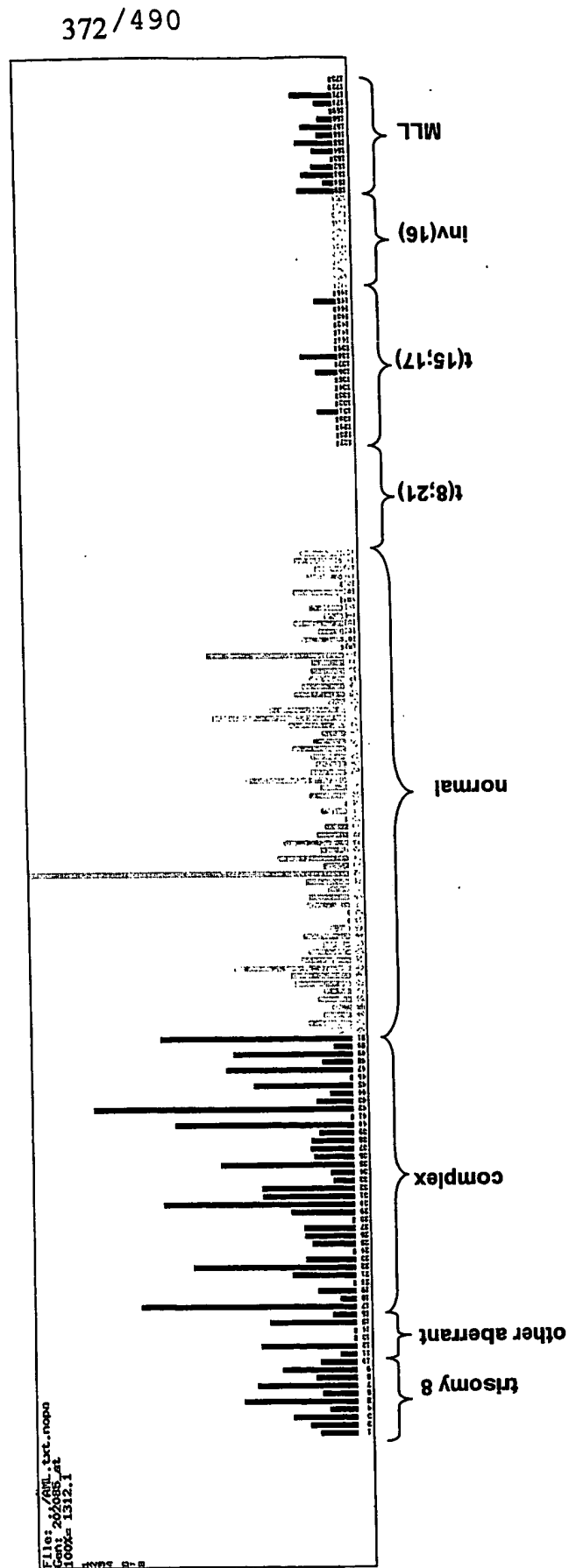


Figure 346



# 202619\_s\_at, PLOD2, AML MLL low

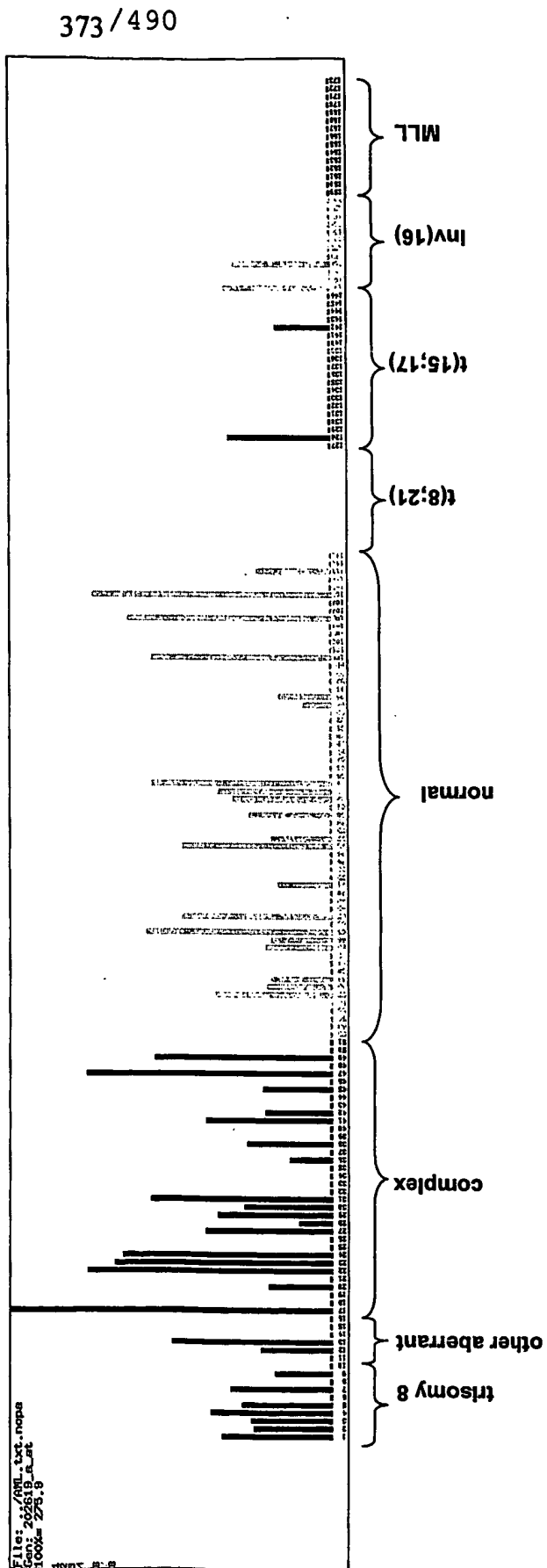


Figure 347

# 202718\_at, IGFBP2, AML t(15;17) high

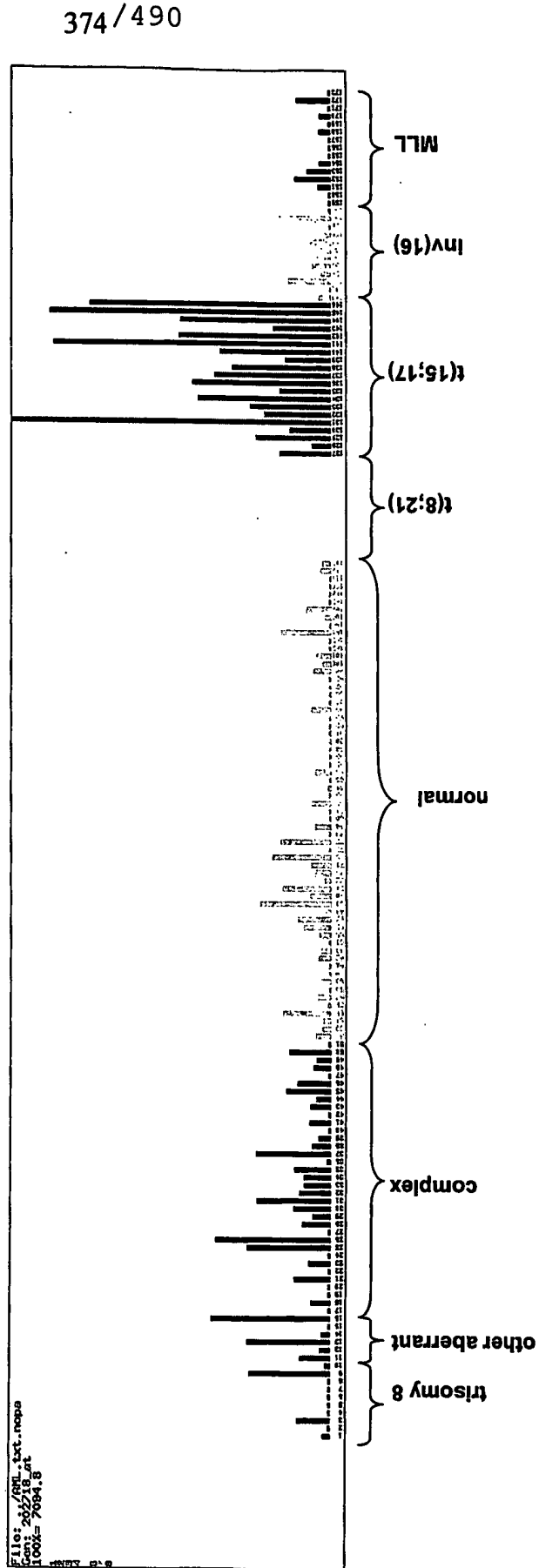


Figure 348

202746\_at, AML MLL low

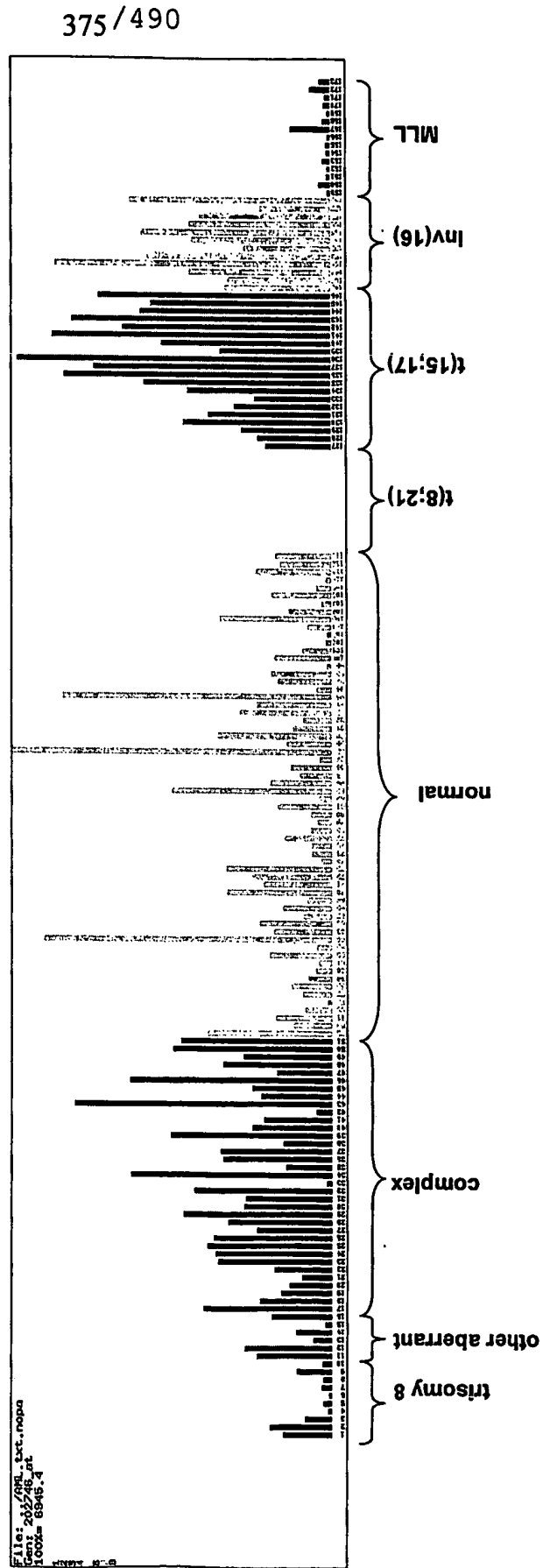


Figure 349

# 203074\_at, ANXA8, AML t(15;17) high

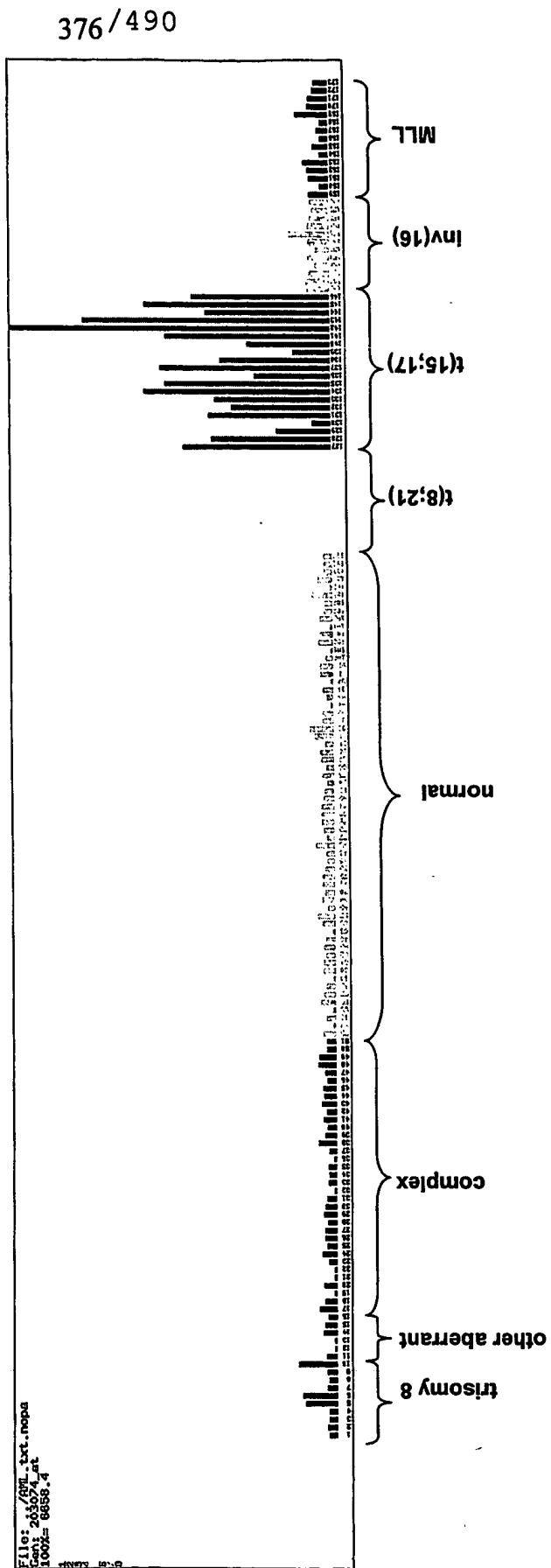


Figure 350

# 203092\_at, TIMM44, AML inv(16) low

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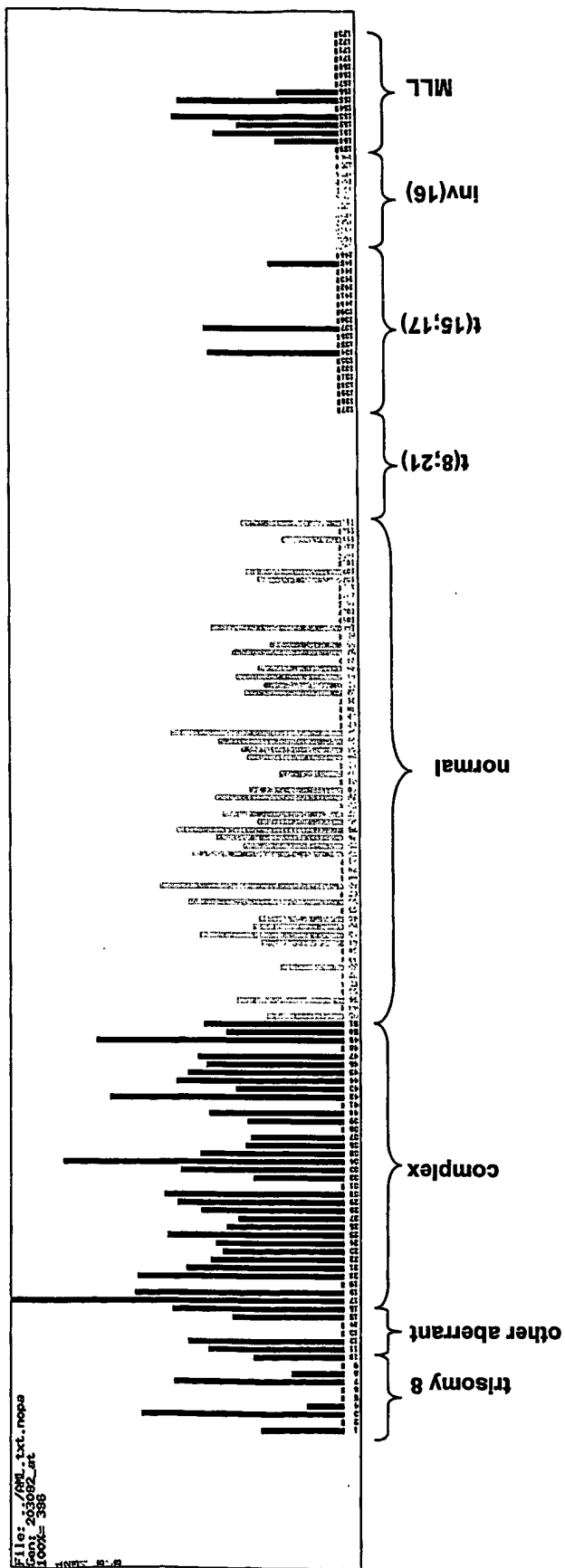


Figure 351

# 203151\_at, MAP1A, AML t(8;21) low

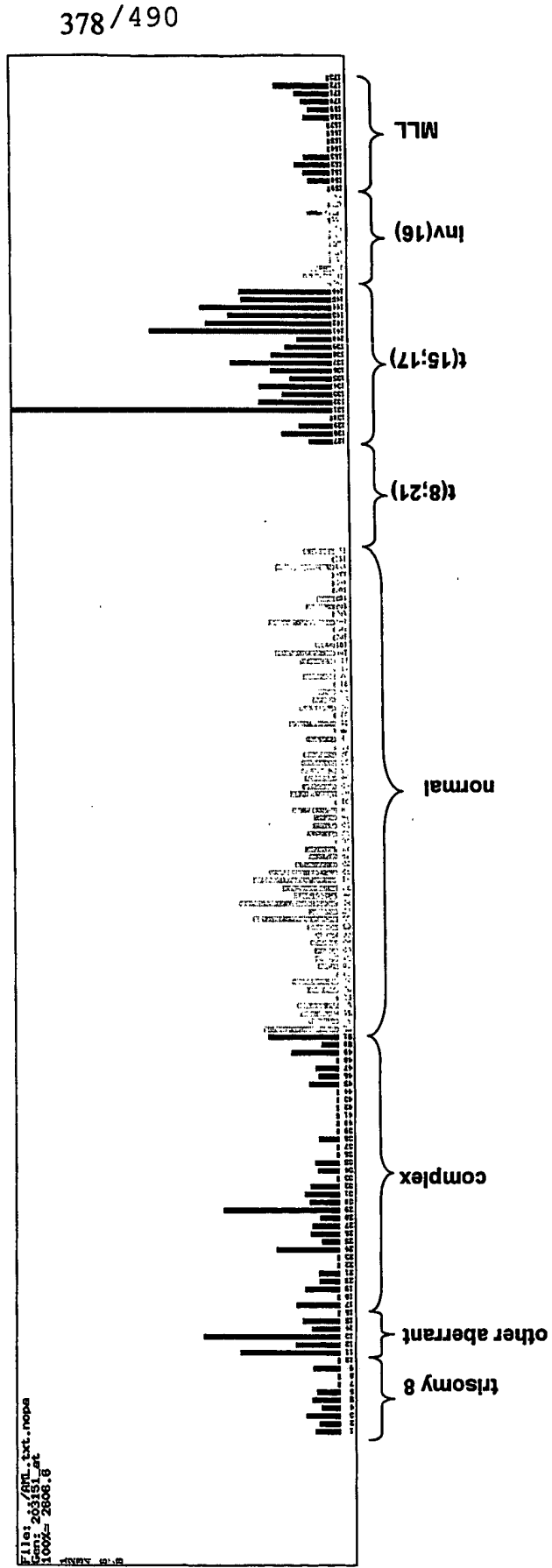


Figure 352

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205528\_s\_at, CBFA2T1, AML t(8;21) high

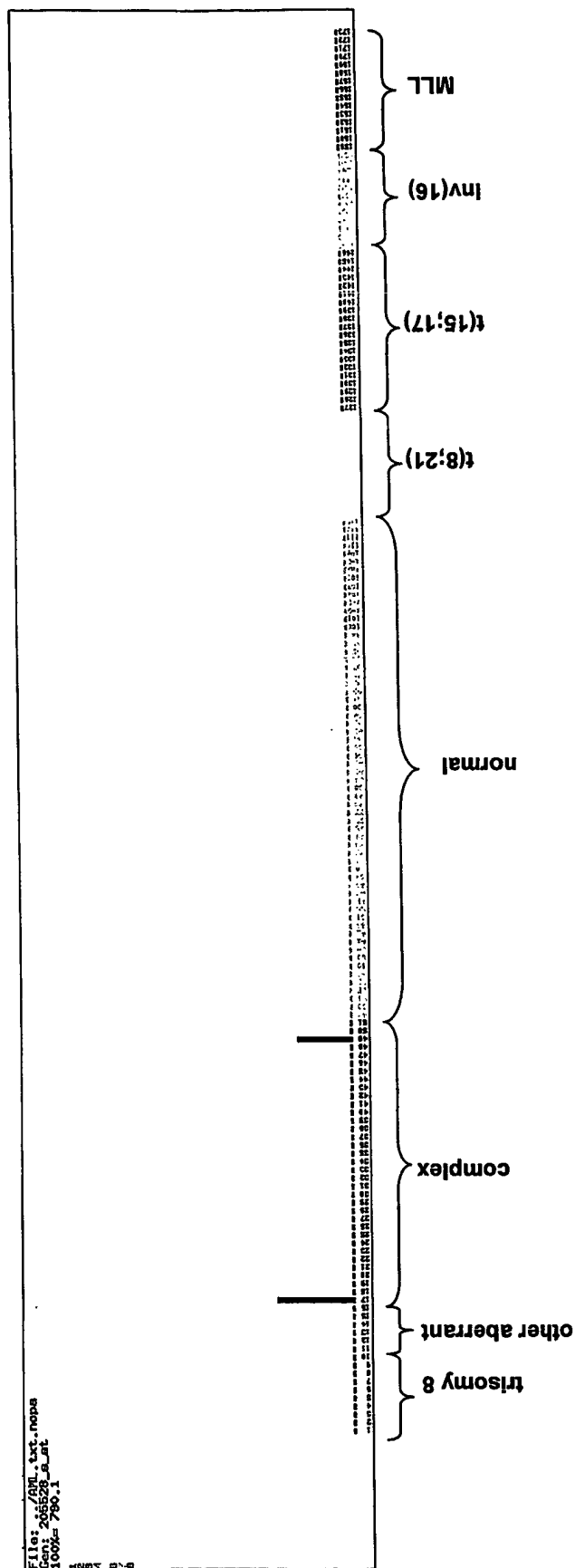


Figure 353

# 205529\_s\_at, CBFA2T1, AML t(8;21) high

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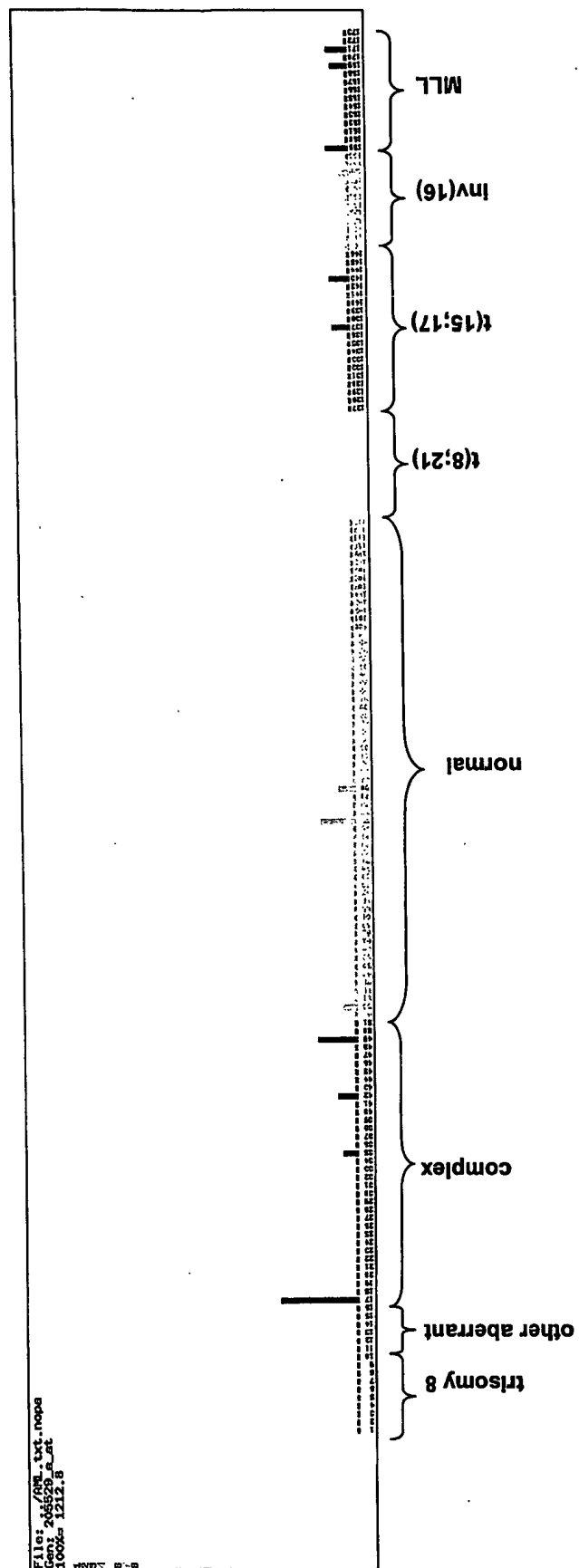


Figure 354



# 204425\_at, ARHGAP4, AML t(15;17) low

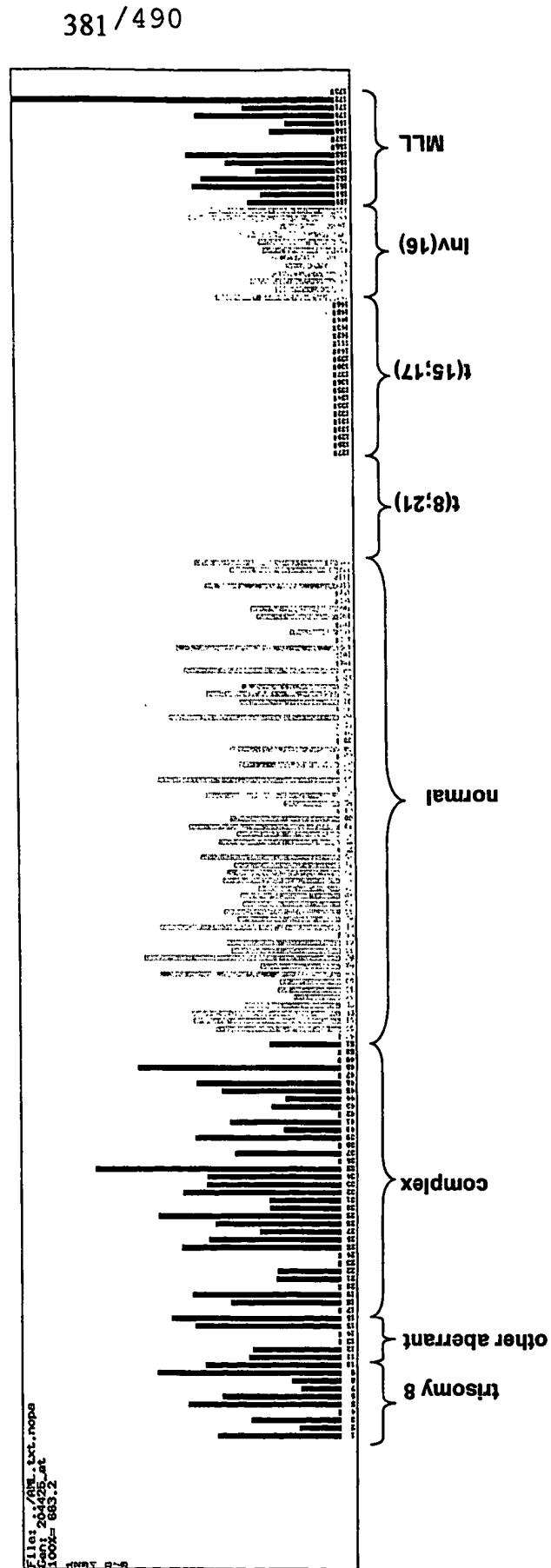


Figure 355



205380\_at, PDZK1, other high

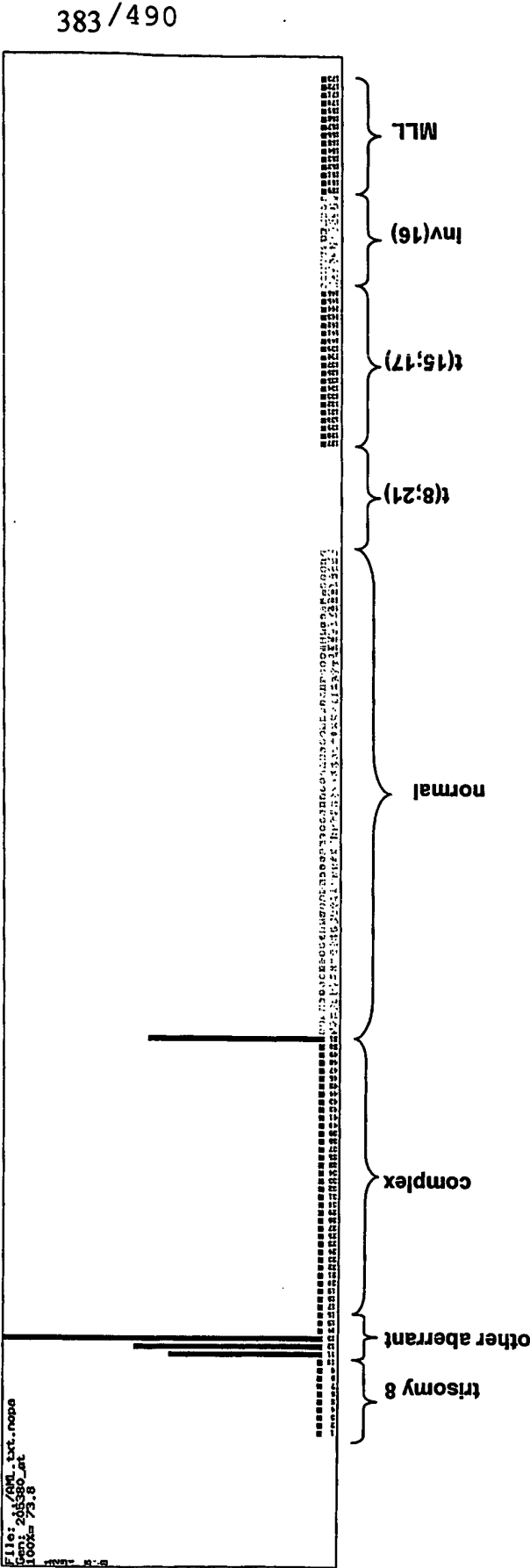


Figure 357

# 205472\_s\_at, DACH, AML MLL high

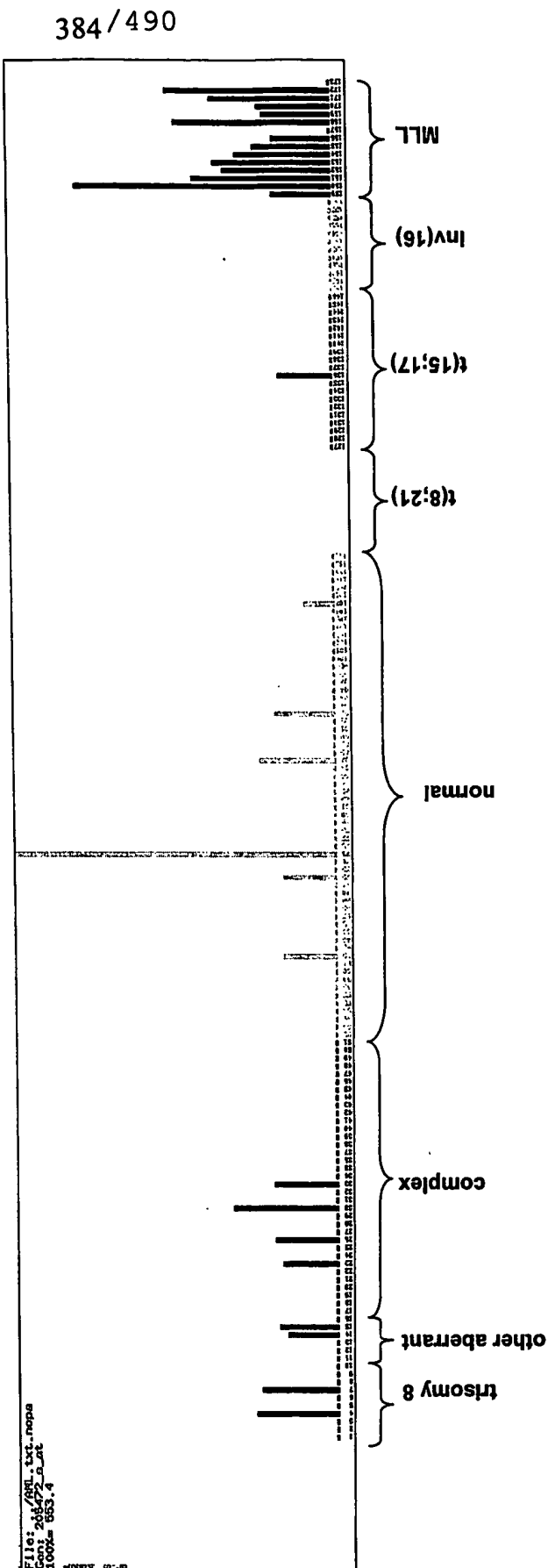


Figure 358

# 225330\_at, AML inv(16) low

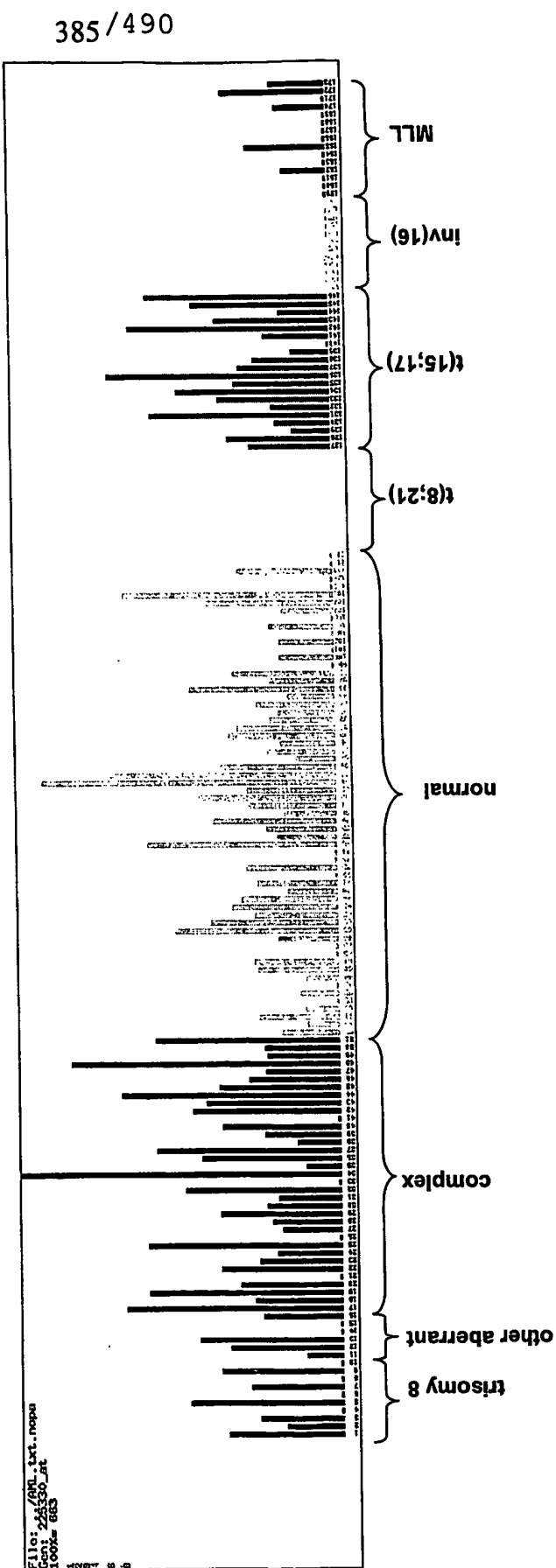


Figure 359

# 228660\_x\_at, SEMA4F, other high

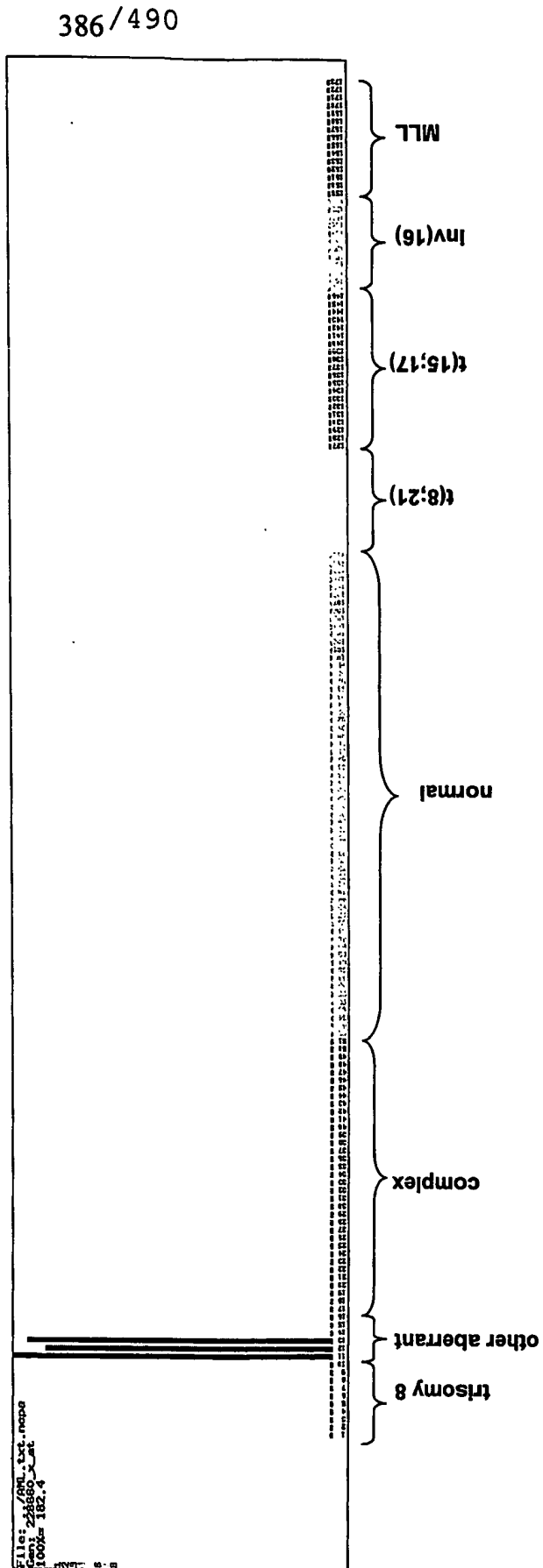


Figure 360

# 206761\_at, TACTILE, AML MLL low

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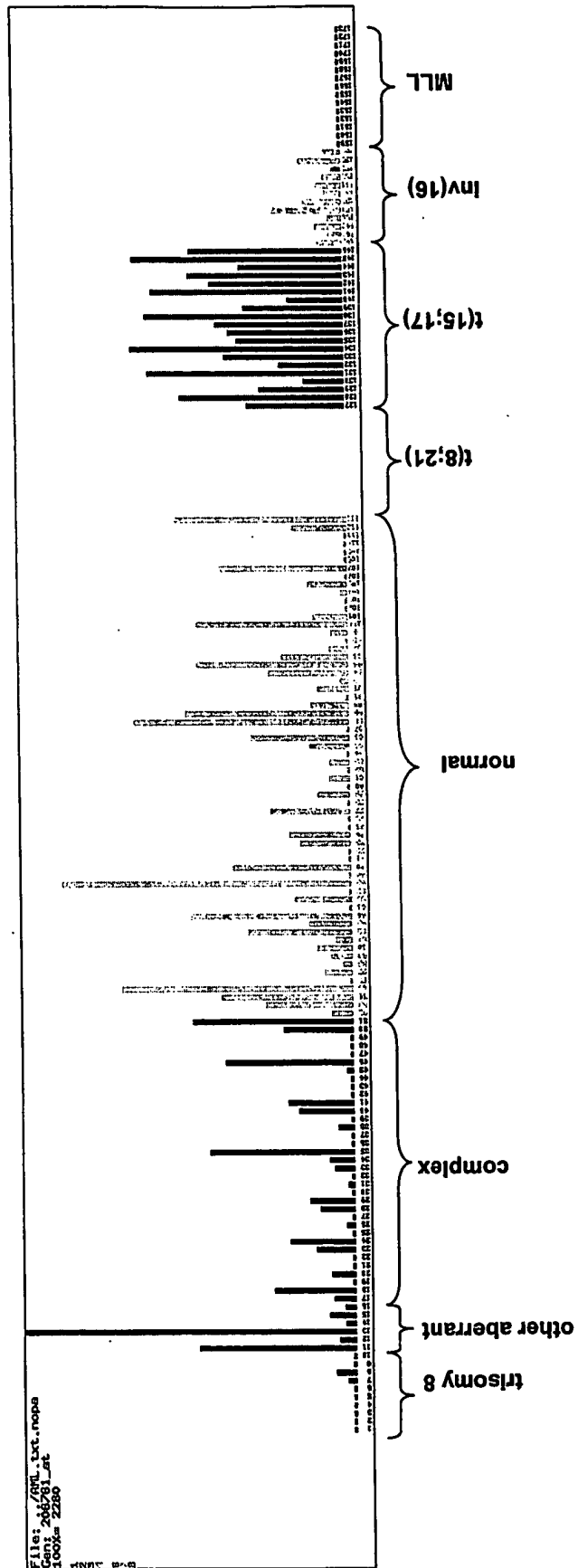


Figure 361

# 206940\_s\_at, POU4F1, AML t(8;21) high

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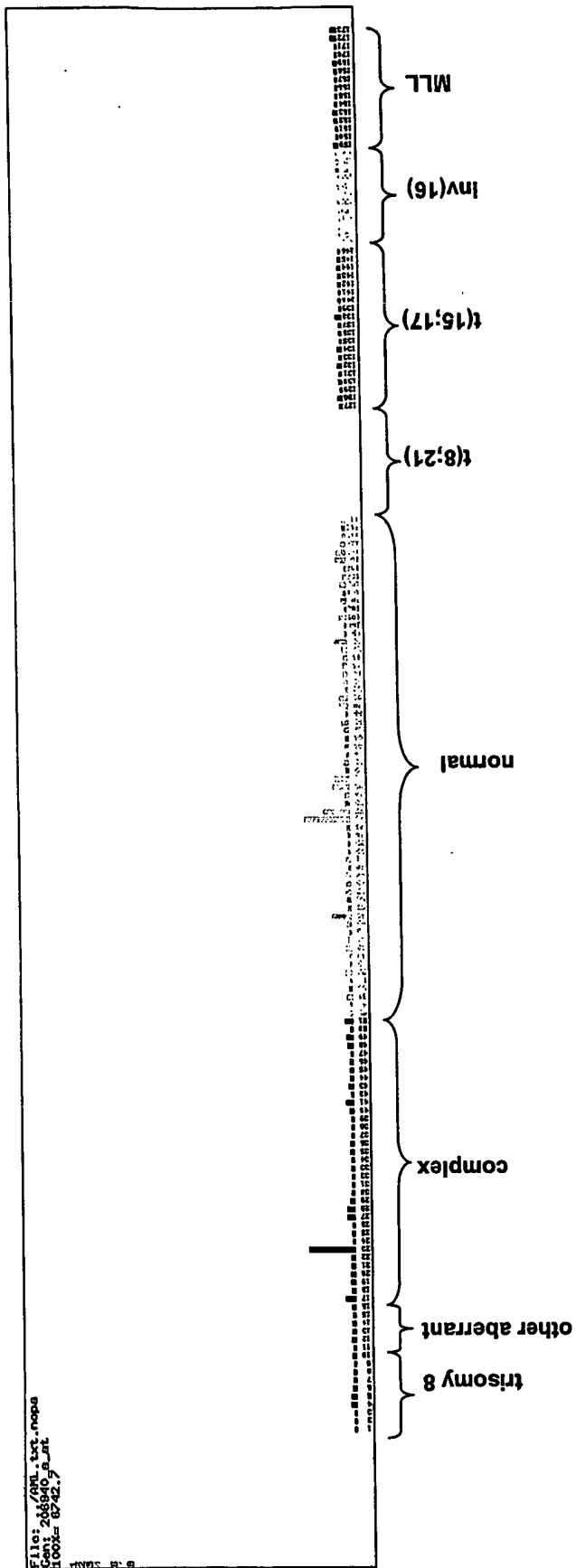


Figure 362



211341\_at, POU4F1, AML t(8;21) high

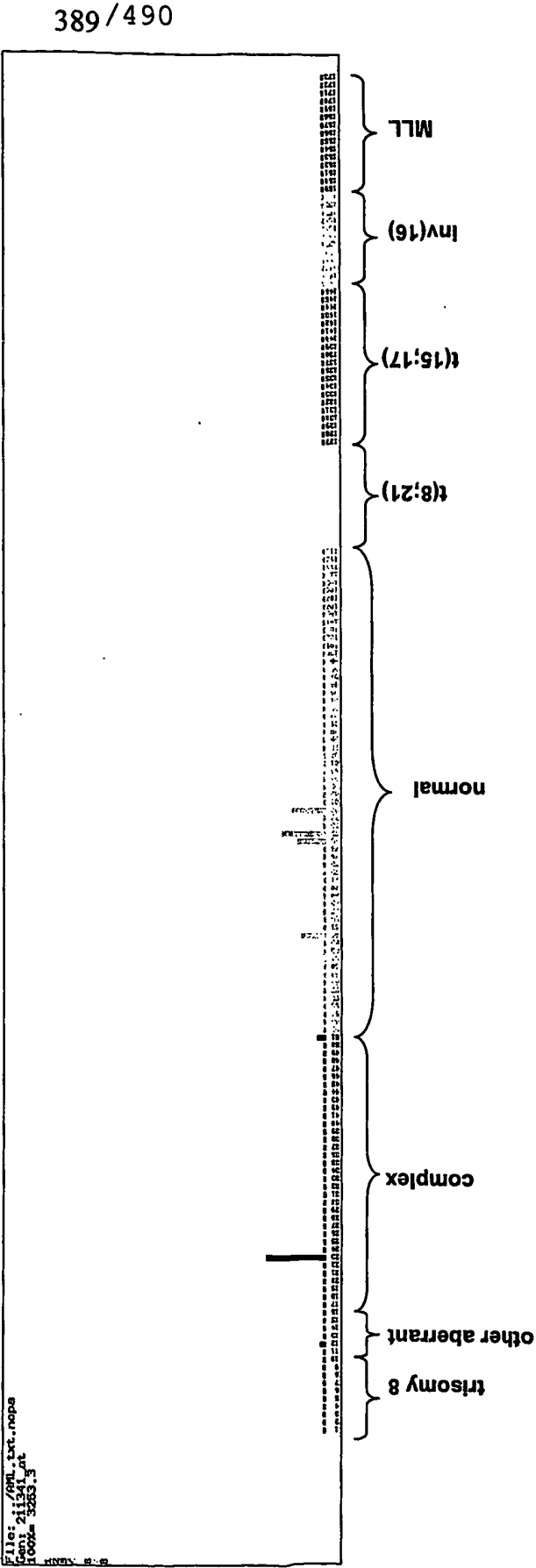


Figure 363

# 212850\_s\_at, LRP4, AML inv(16) high

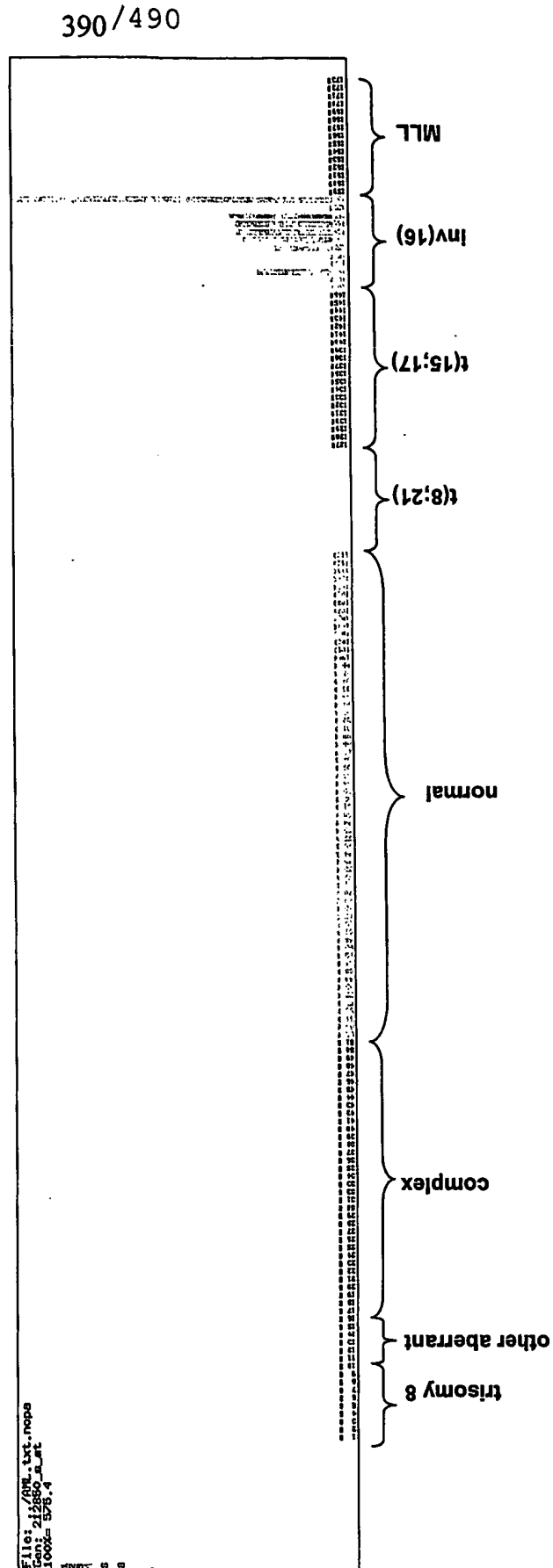


Figure 364

222166\_at, AML +8 low

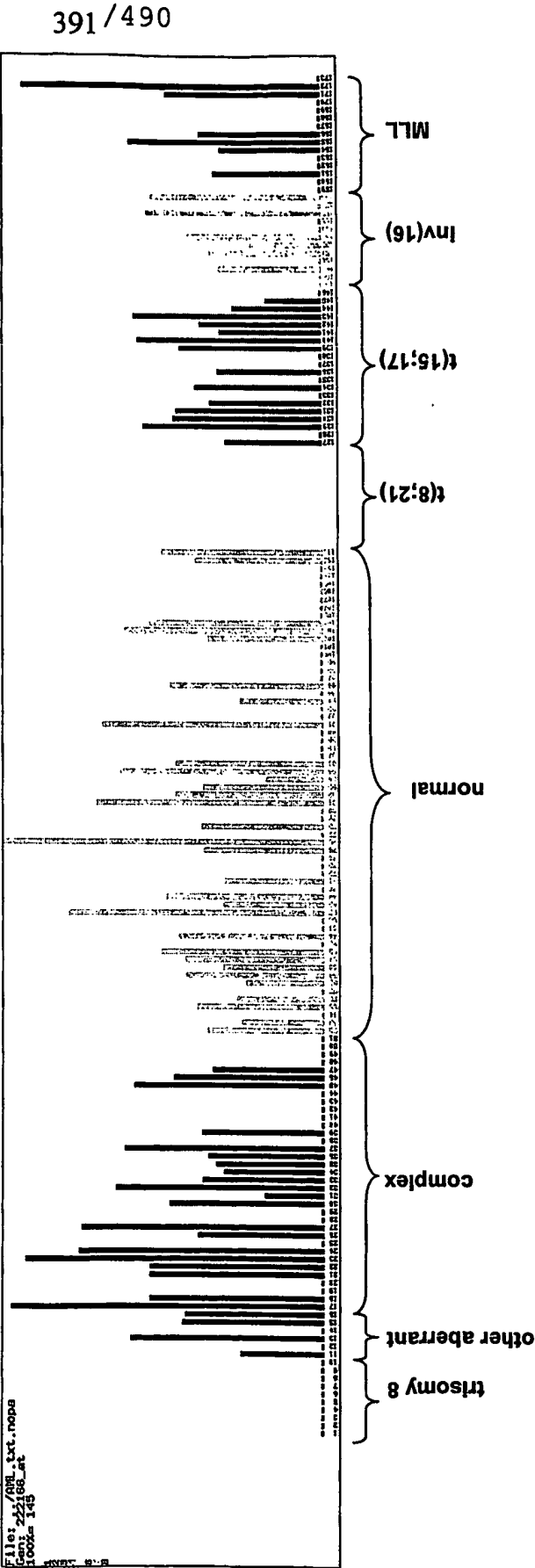


Figure 365

# 222335\_at, AML MLL low

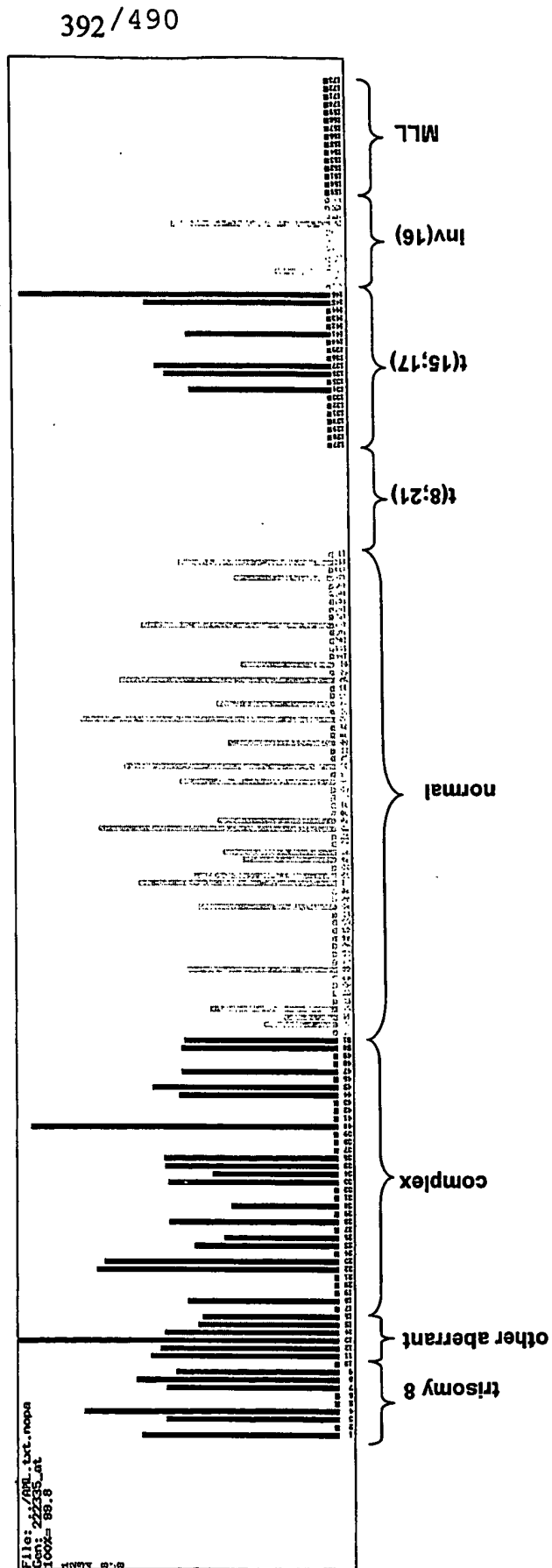


Figure 366

# 223318\_s\_at, MGC10974, AML complex low

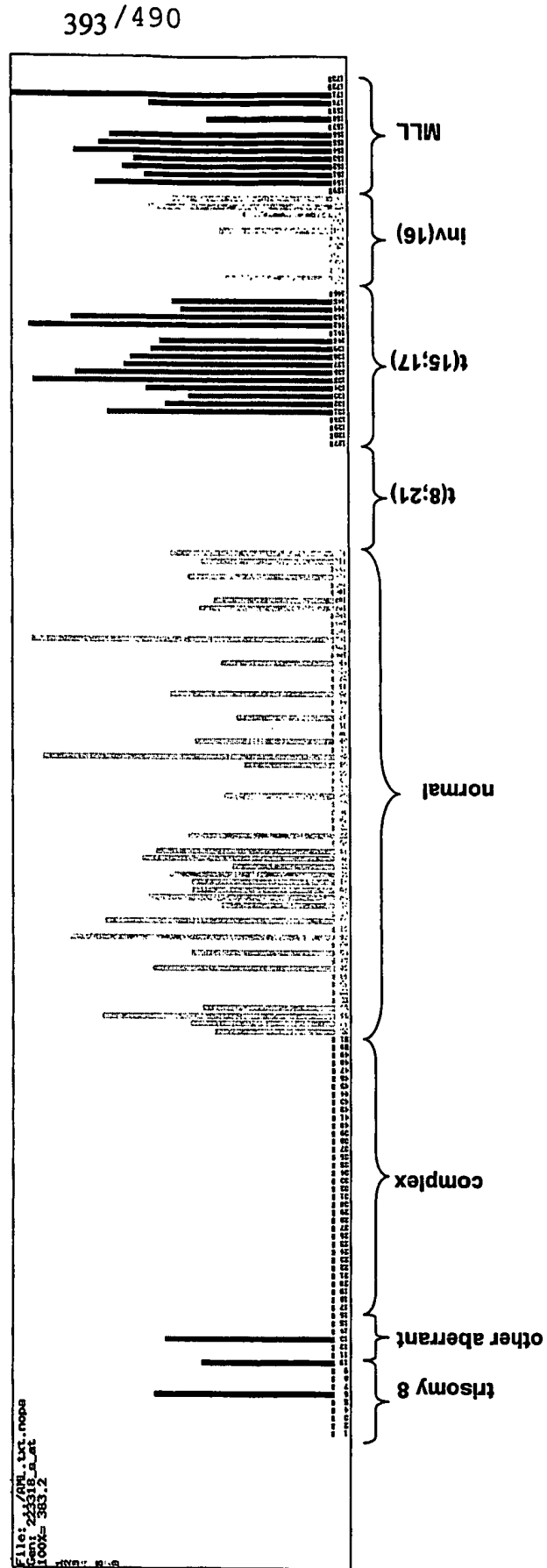


Figure 367

# 228827\_at, AML t(8;21) high

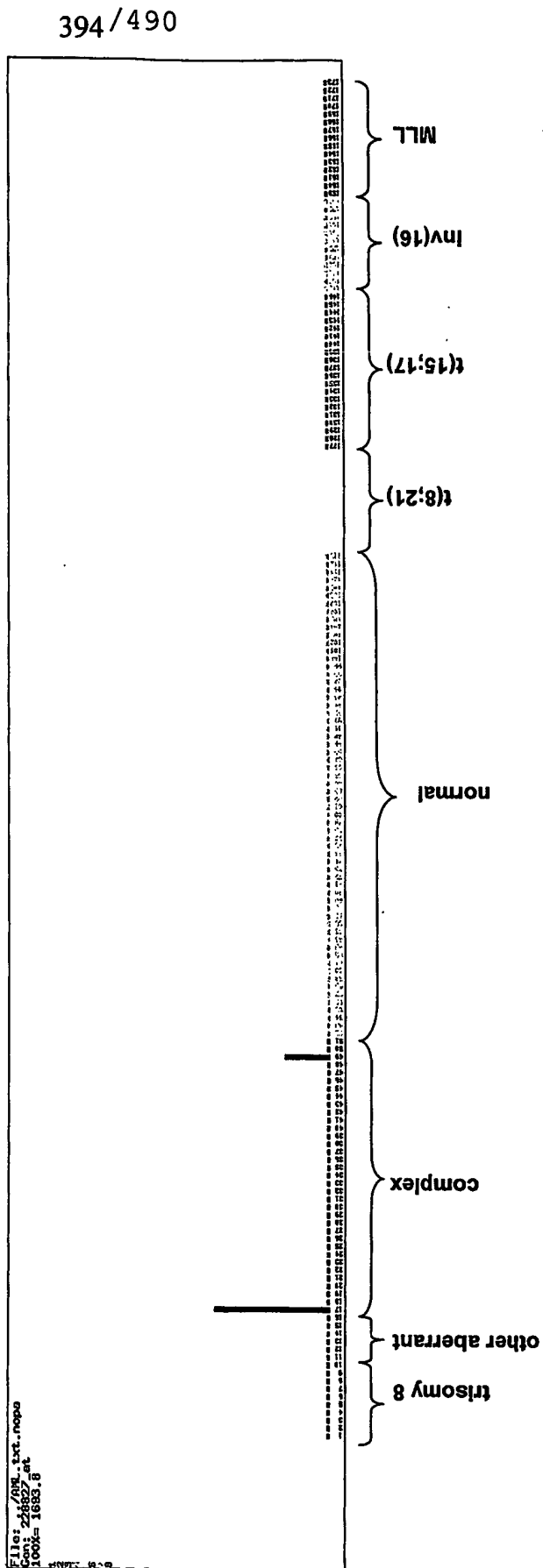


Figure 368

228904\_at, AML t(8;21) low, AML t(15;17) low,  
AML inv(16) low, AML MLL low

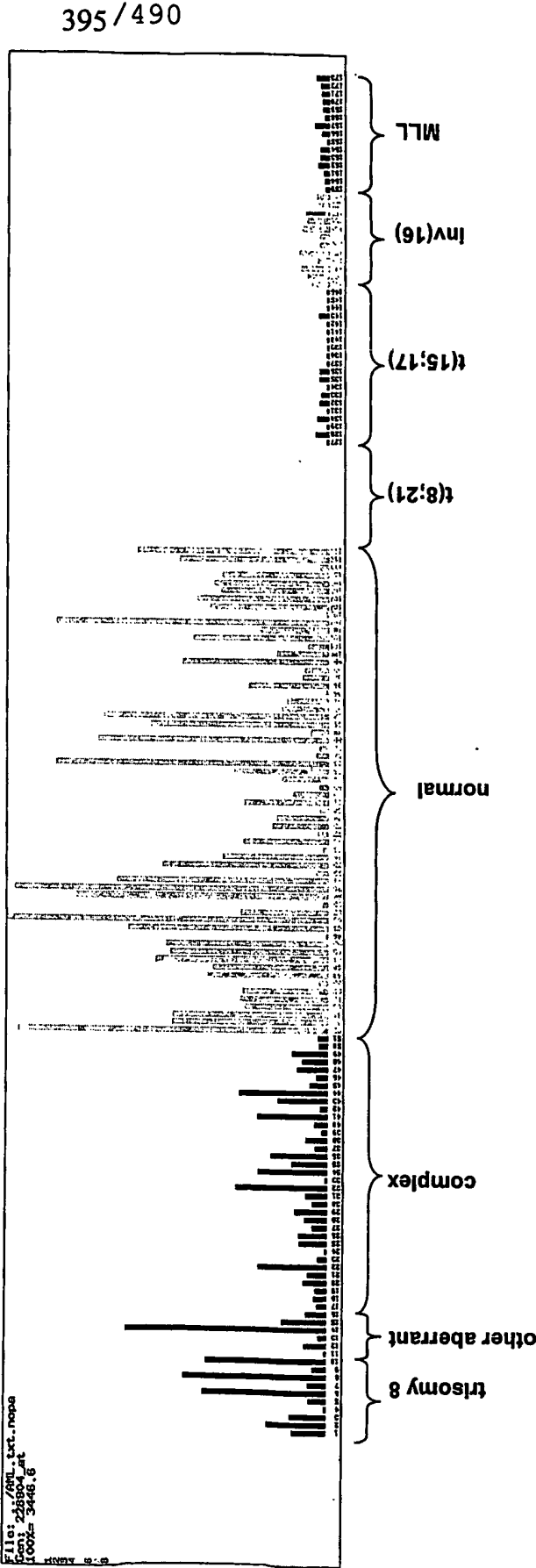


Figure 369

# 231277\_x\_at, AML complex low

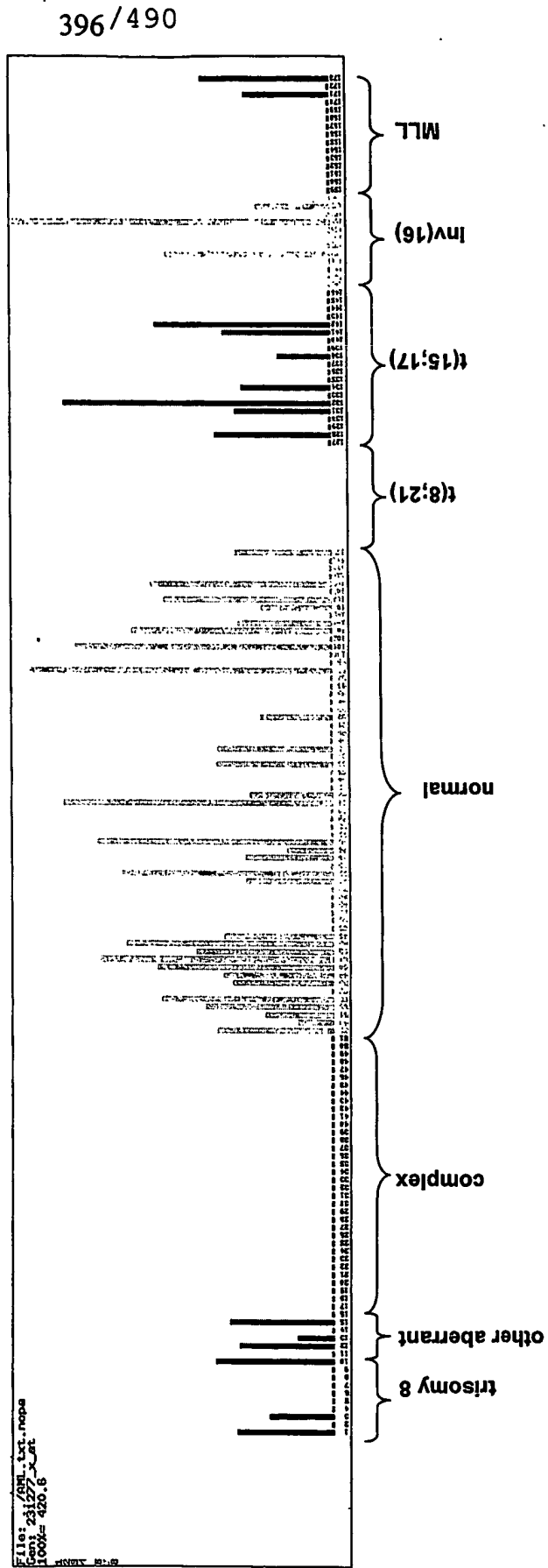


Figure 370



203787\_at, SSBP2, tri 12 vs. all others

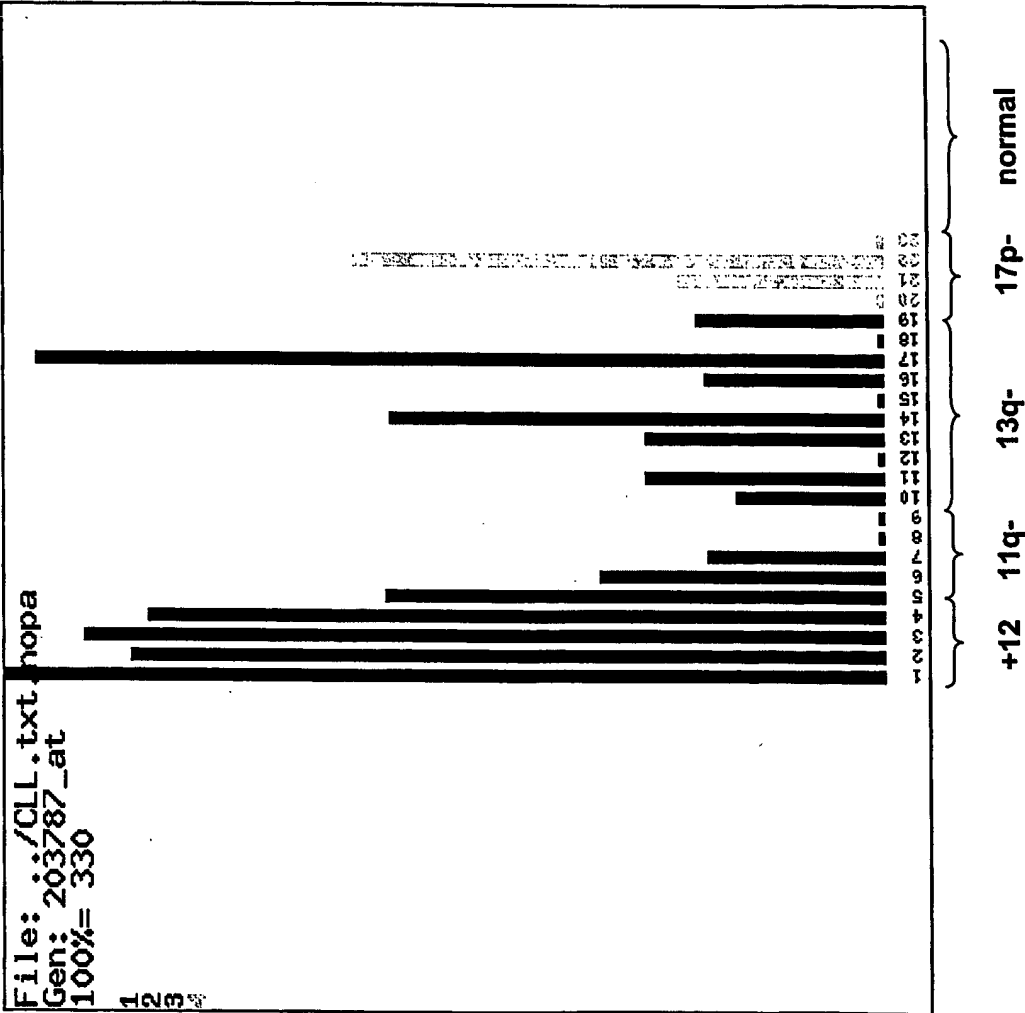


Figure 371

240785\_at, tri 12 vs. all others

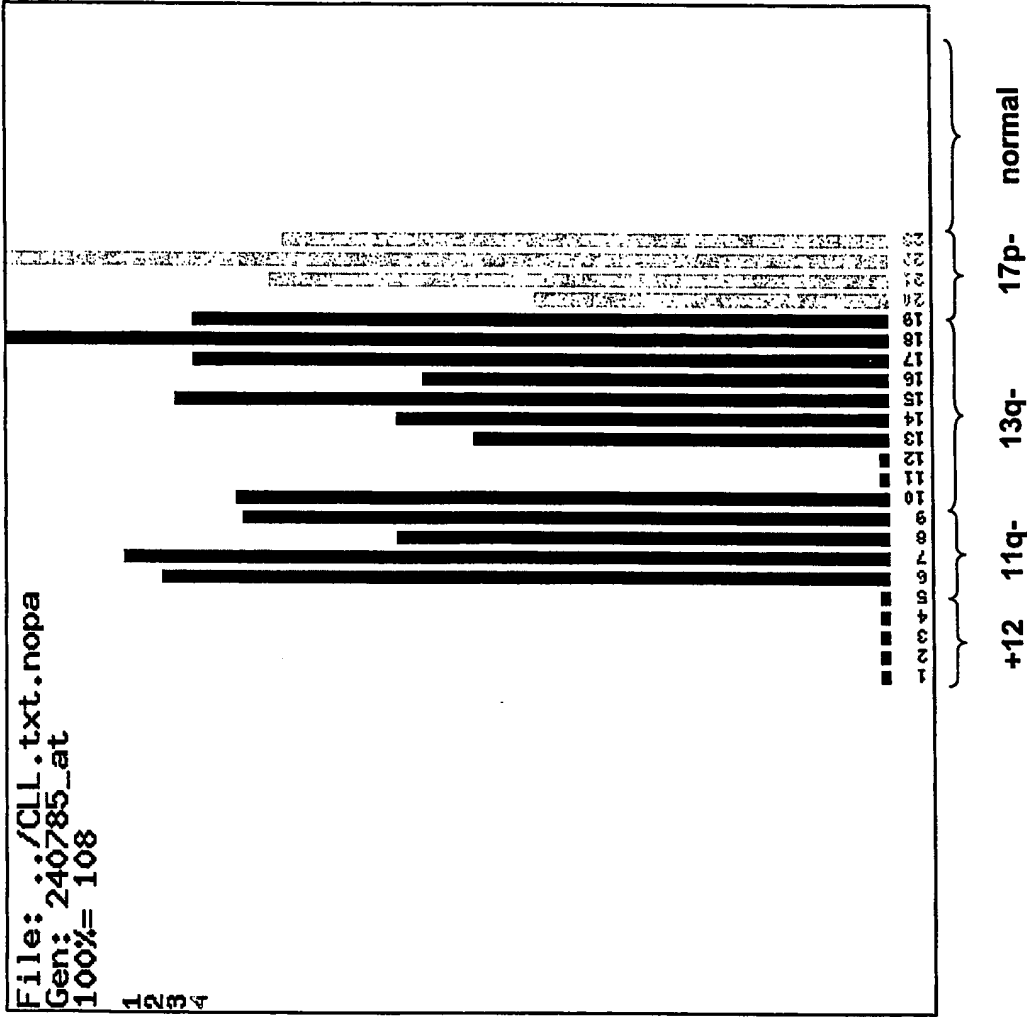
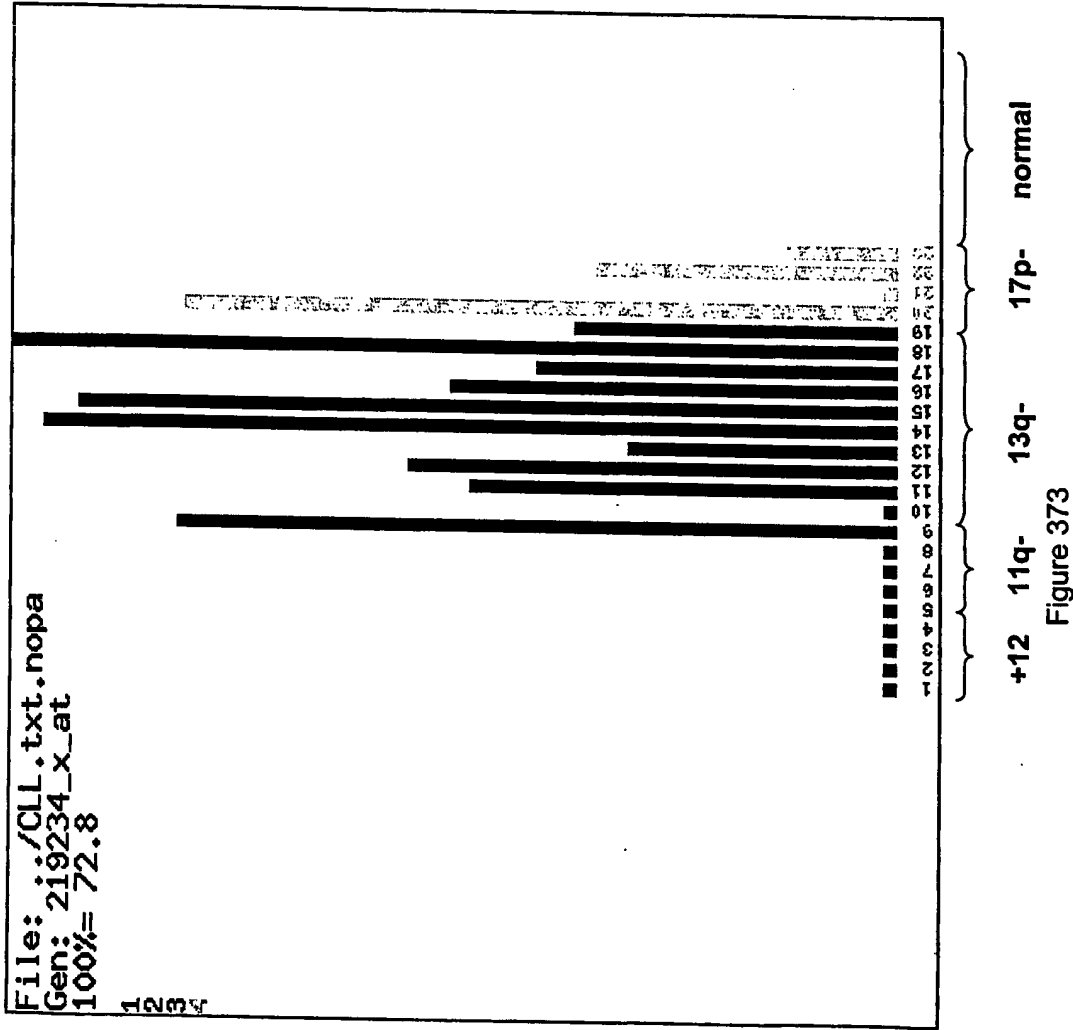


Figure 372

219234\_x\_at, FLJ23142, tri 12 vs. all others



233106\_at, tri 12 vs. 11q-

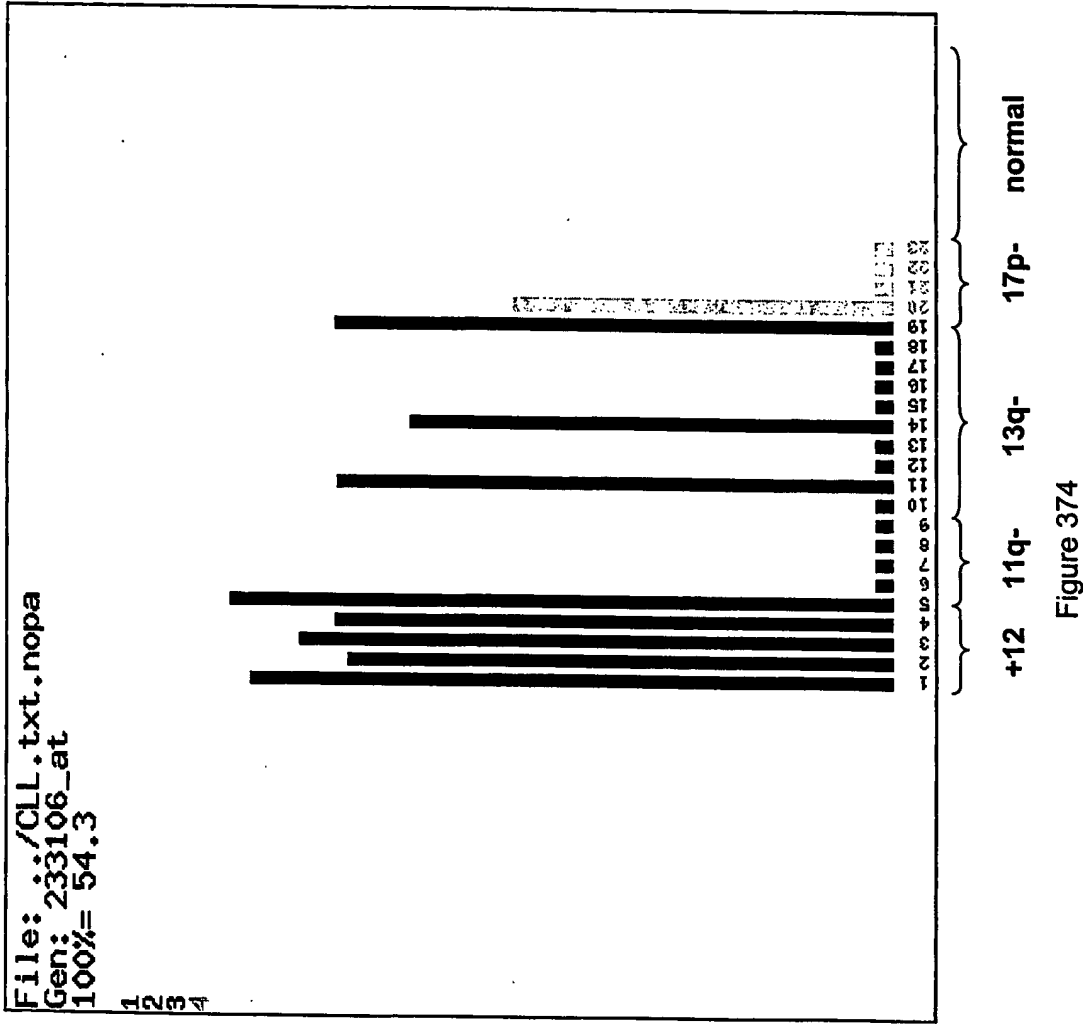
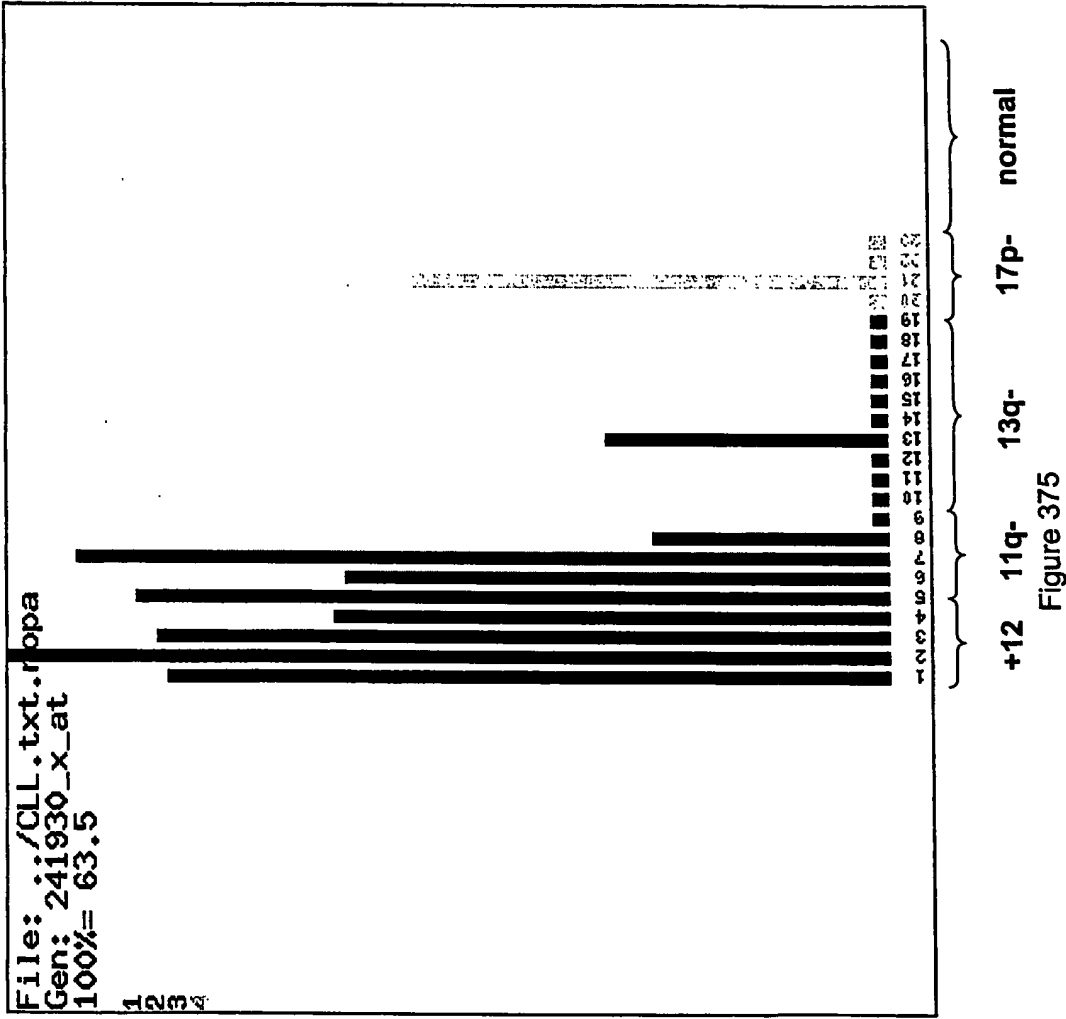


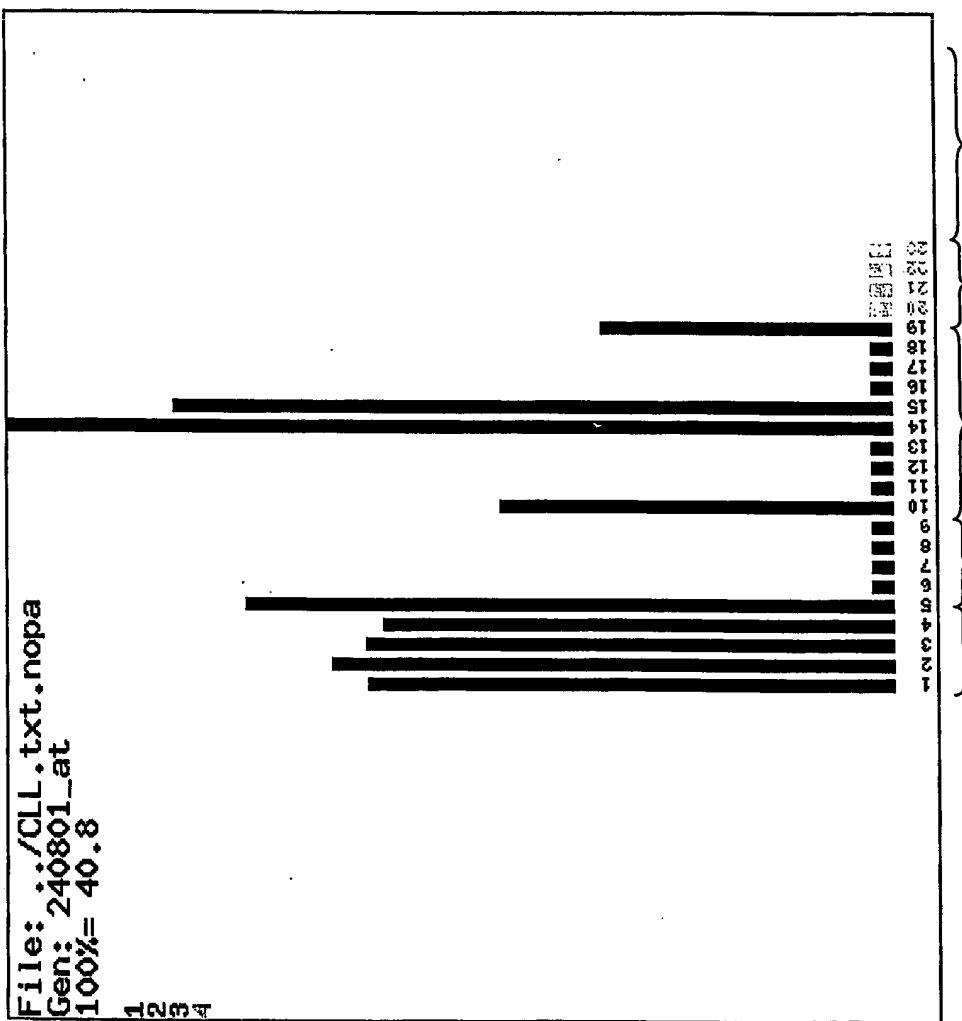
Figure 374

241930\_x\_at, tri 12 vs. 13q-



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240801\_at, C21orf37, tri 12 vs. 17p-



+12 11q- 13q- 17p- normal

Figure 376

204227\_s\_at, TK2, tri 12 vs. normal

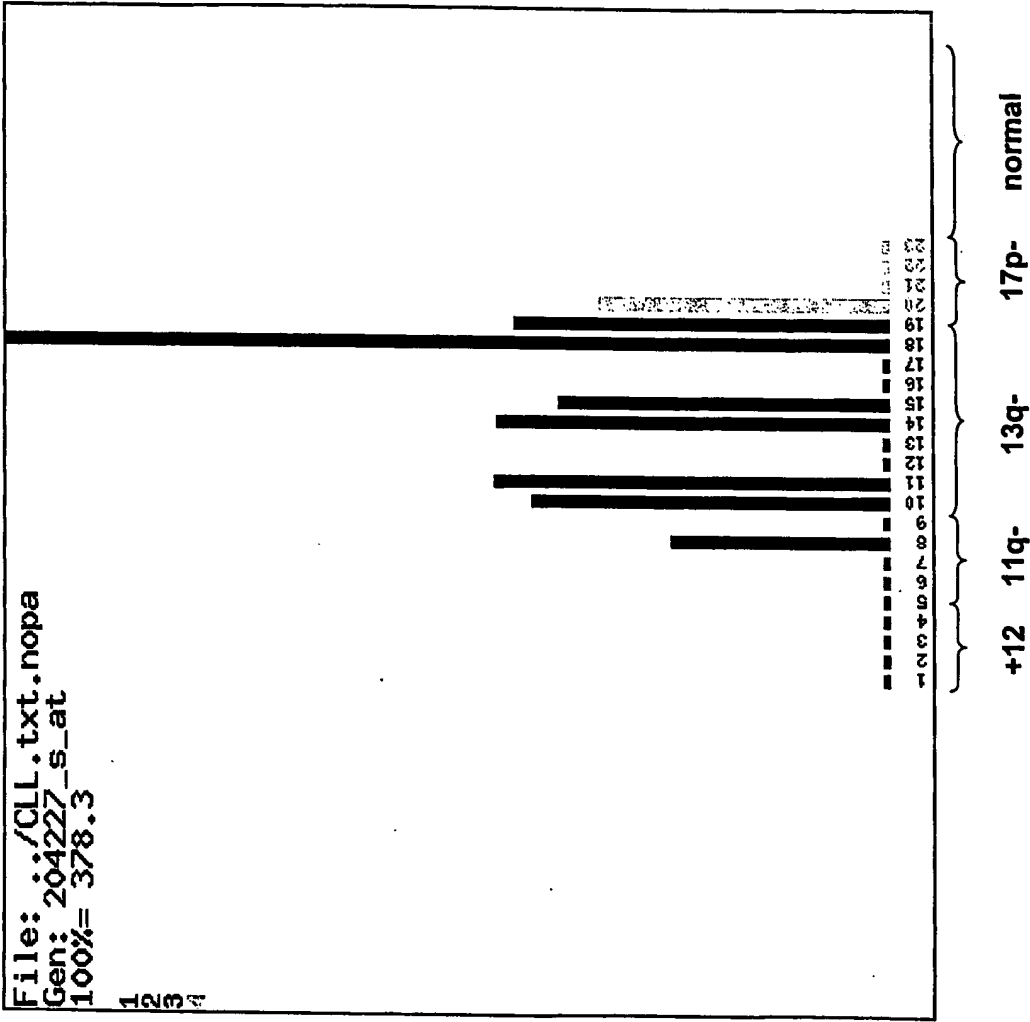


Figure 377

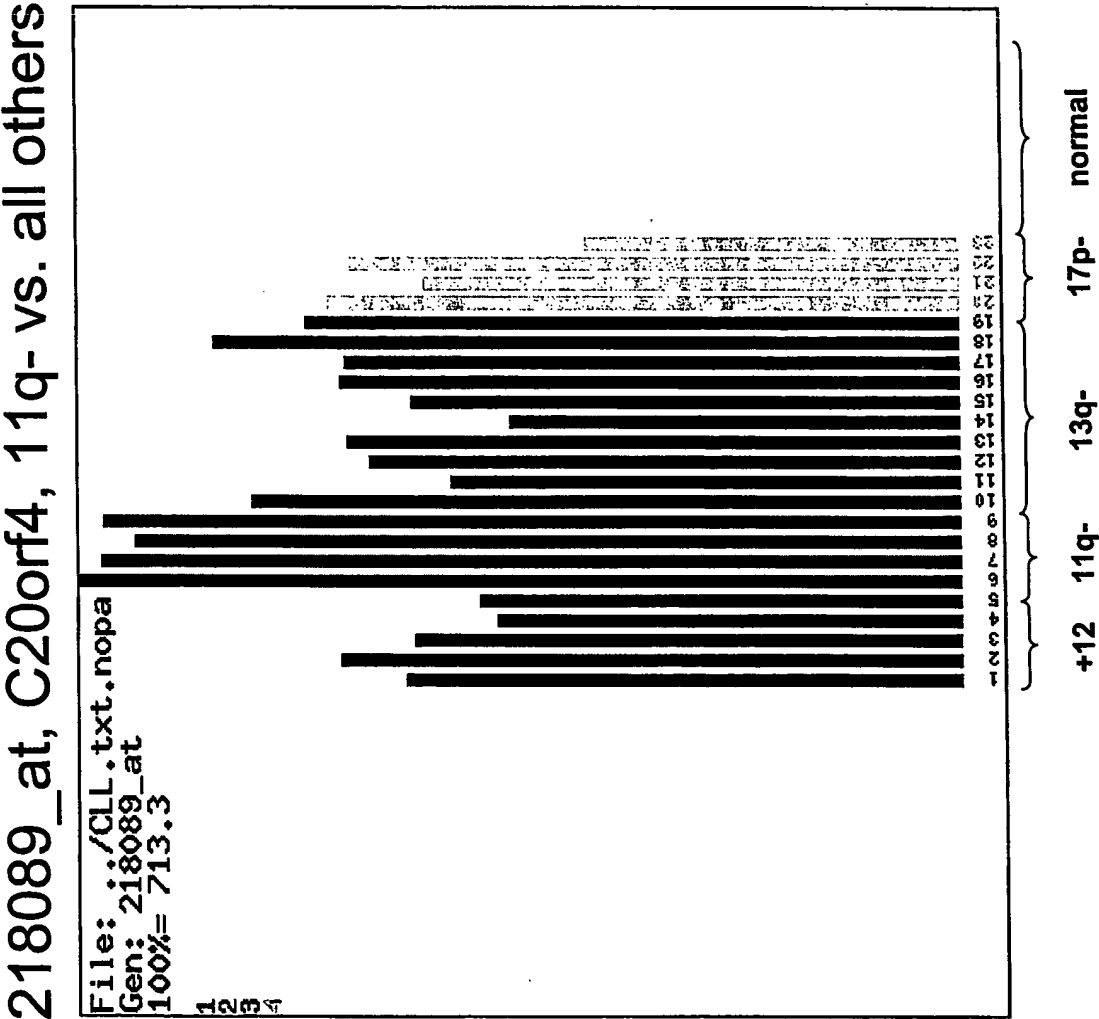


Figure 378



219846\_at, FLJ23040, 11q- vs. 13q-

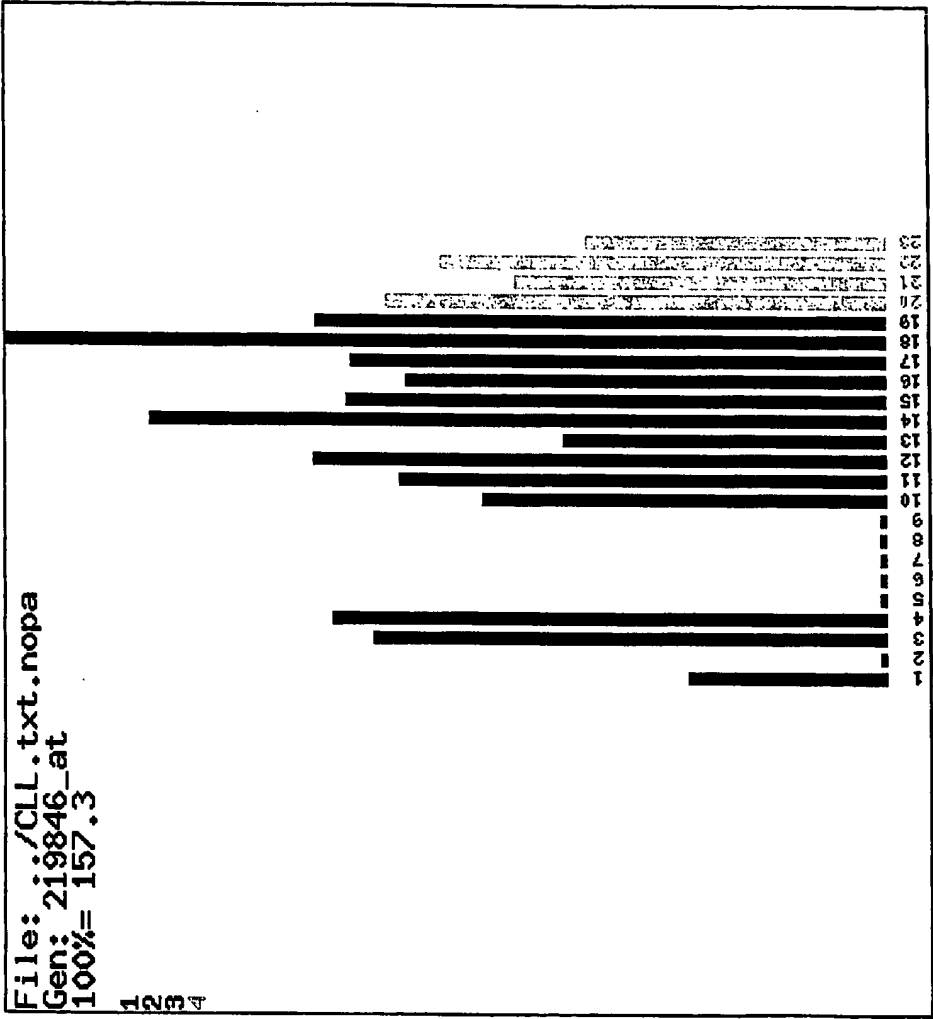


Figure 379

203910\_at, PARG1, 11q- vs. 17p-

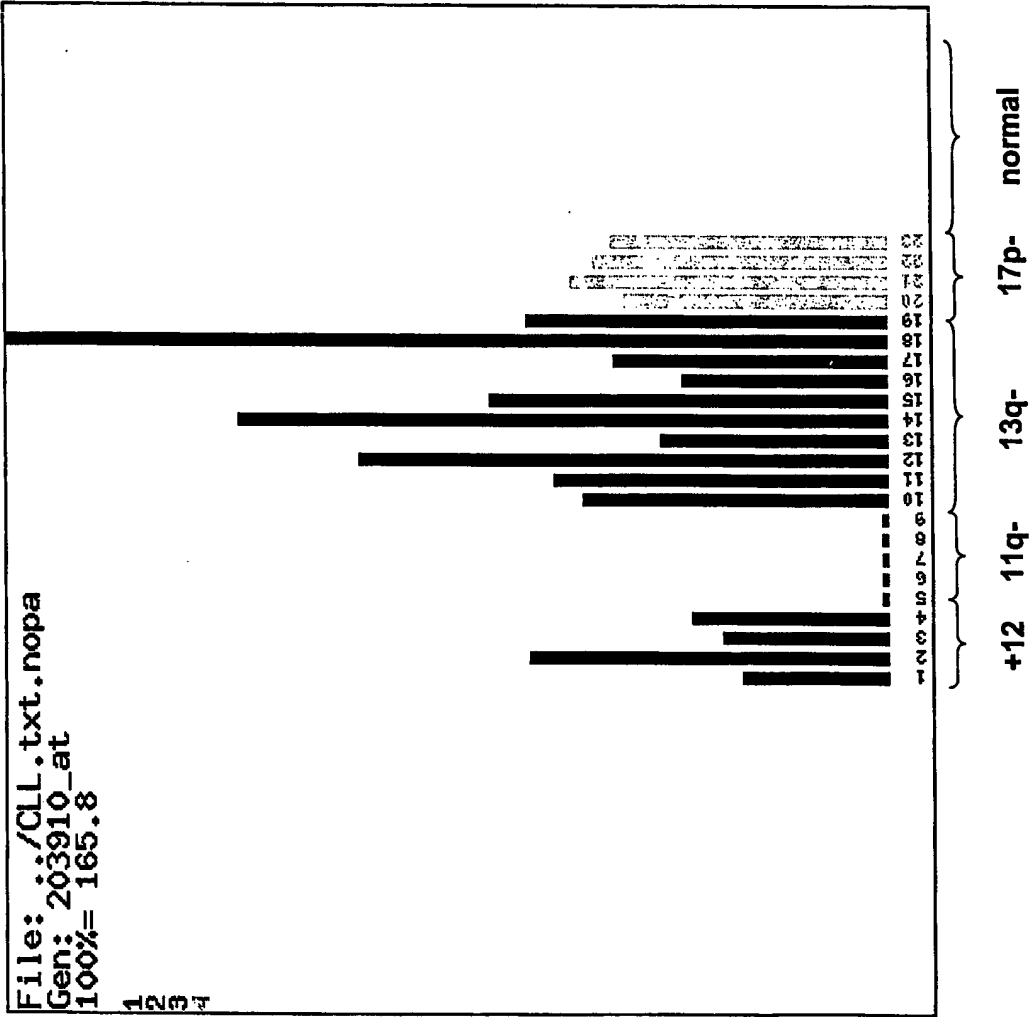
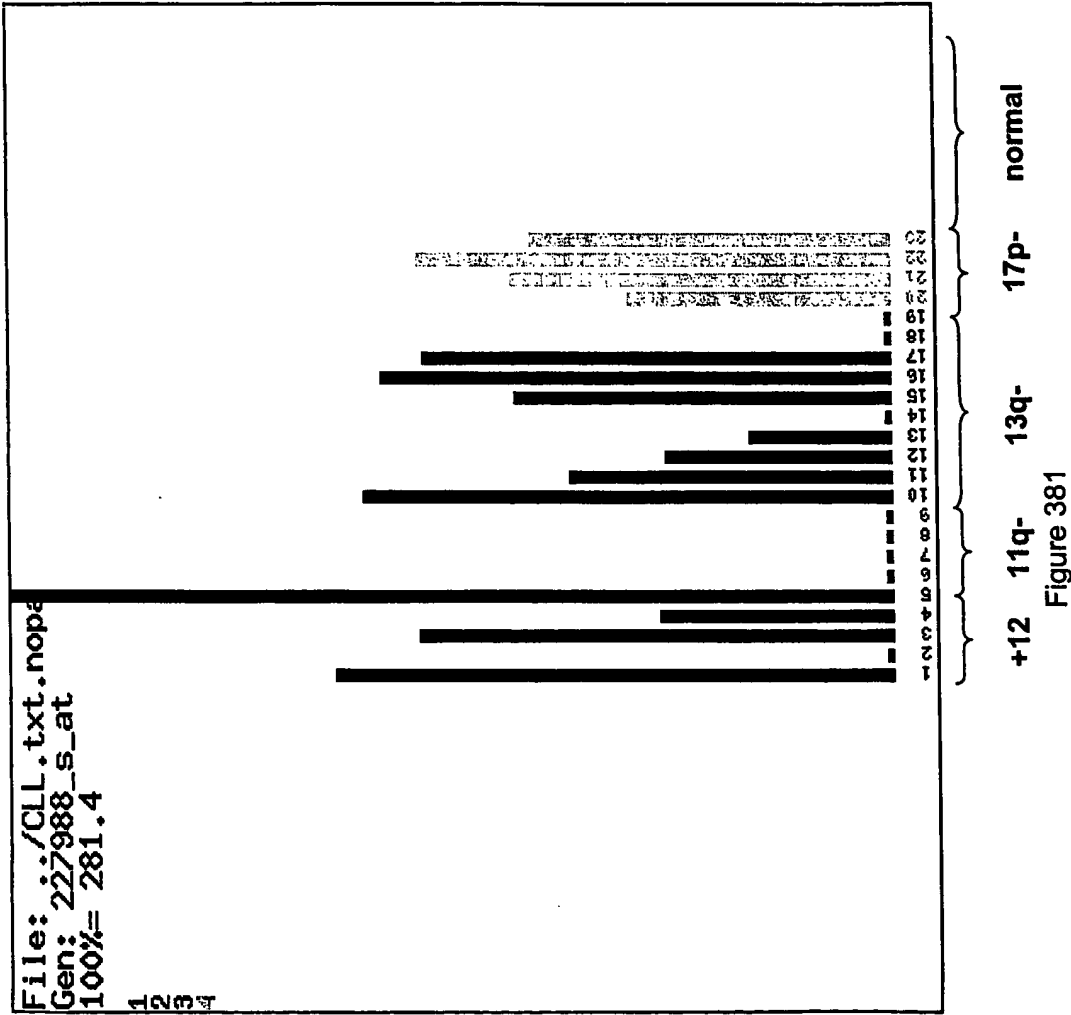


Figure 380

227988\_s\_at, CHAC, 11q- vs. normal



209561\_at, THBS3, 13q- vs. all others

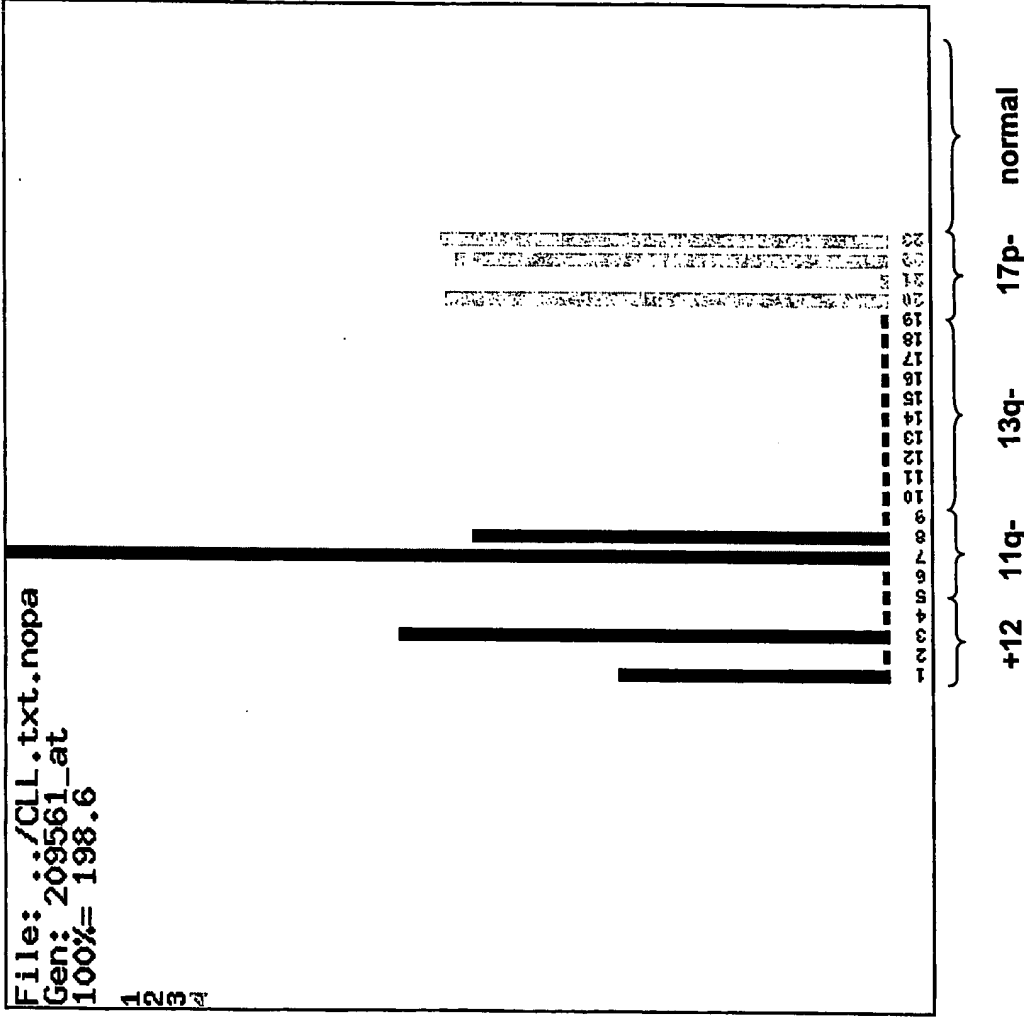


Figure 382

212346\_s\_at, 13q- vs. all others

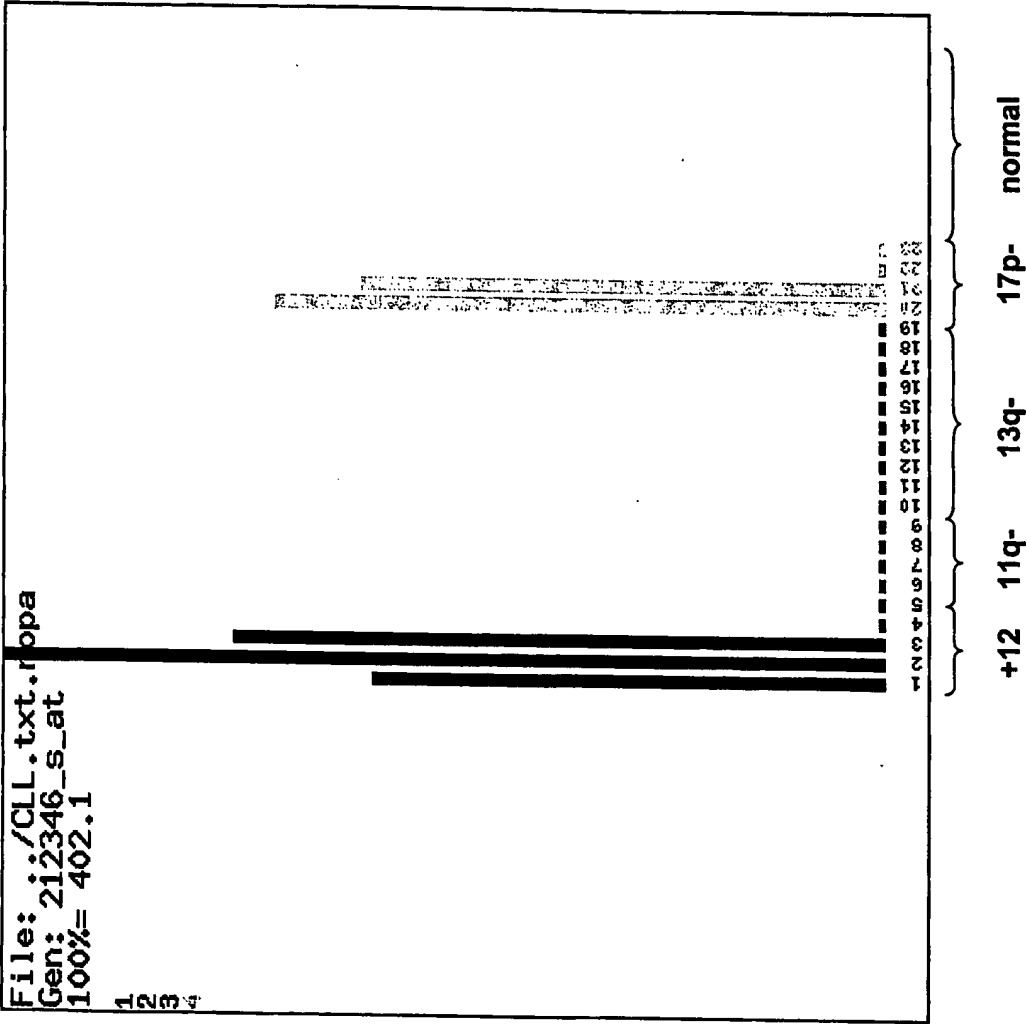


Figure 383

214693\_x\_at, DJ328E19.C1.1, 13q- vs. all others

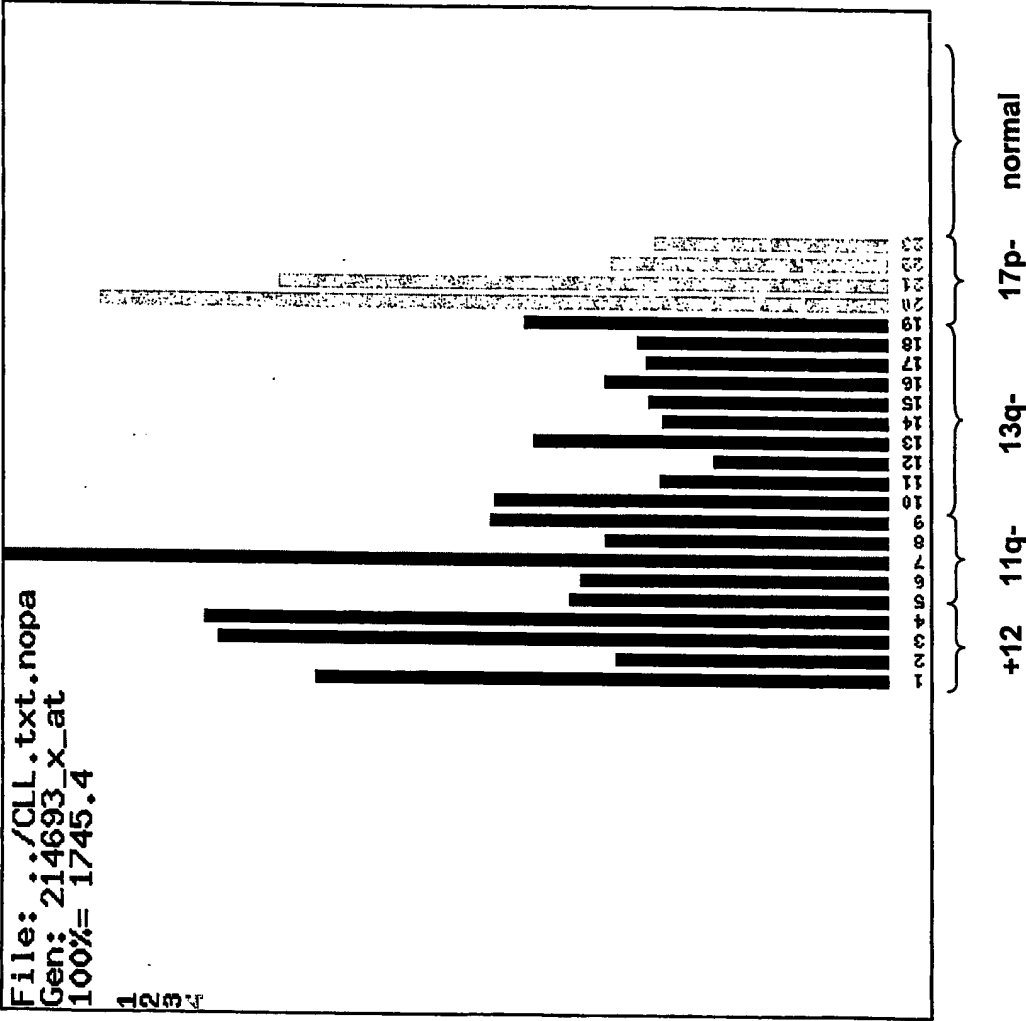
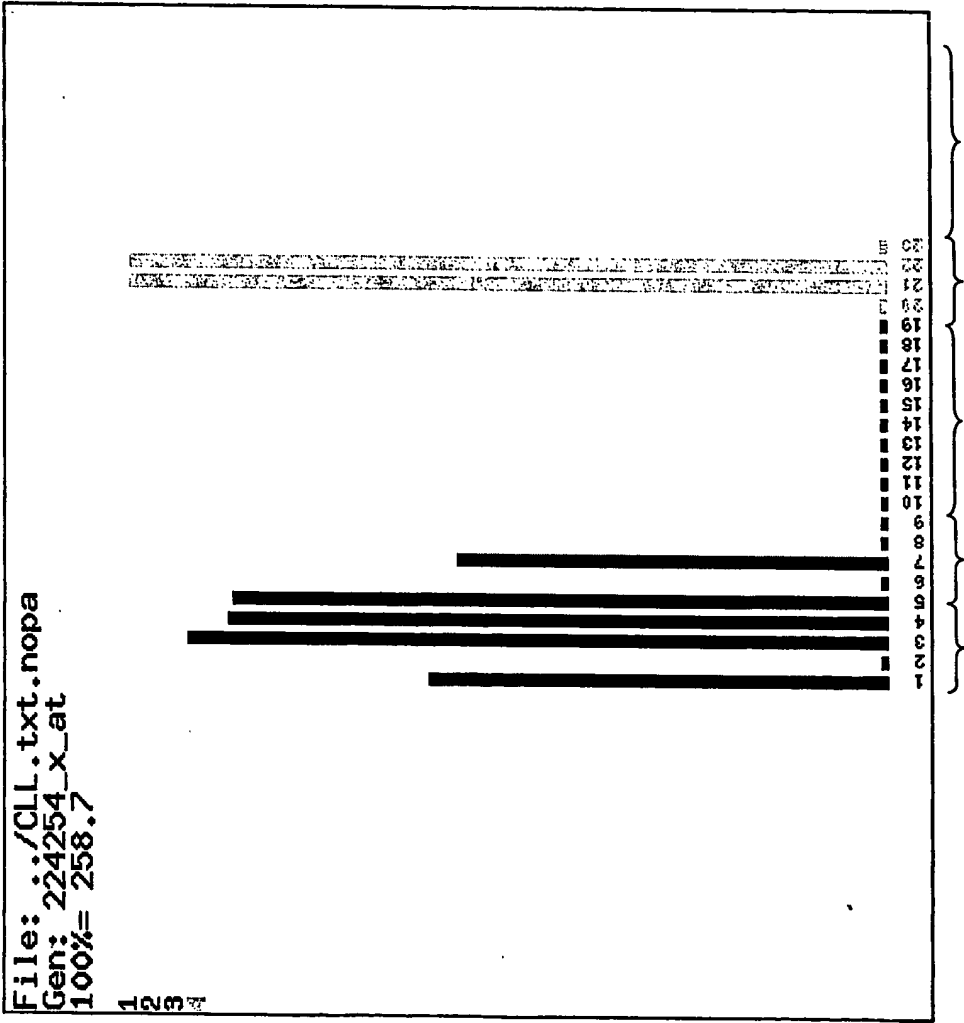


Figure 384

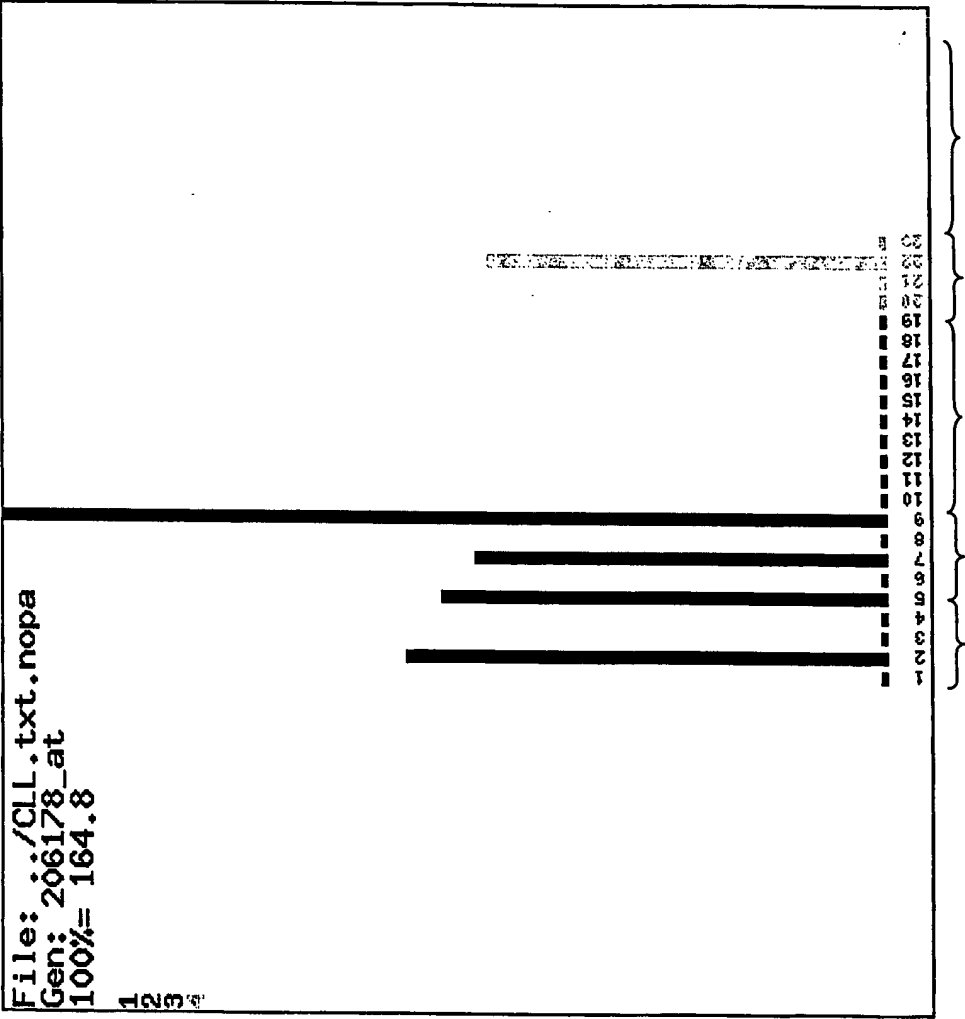
224254\_x\_at, 13q- vs. Rest



+12 11q- 13q- 17p- normal

Figure 385

206178\_at, PLA2G5, 13q- vs. all others

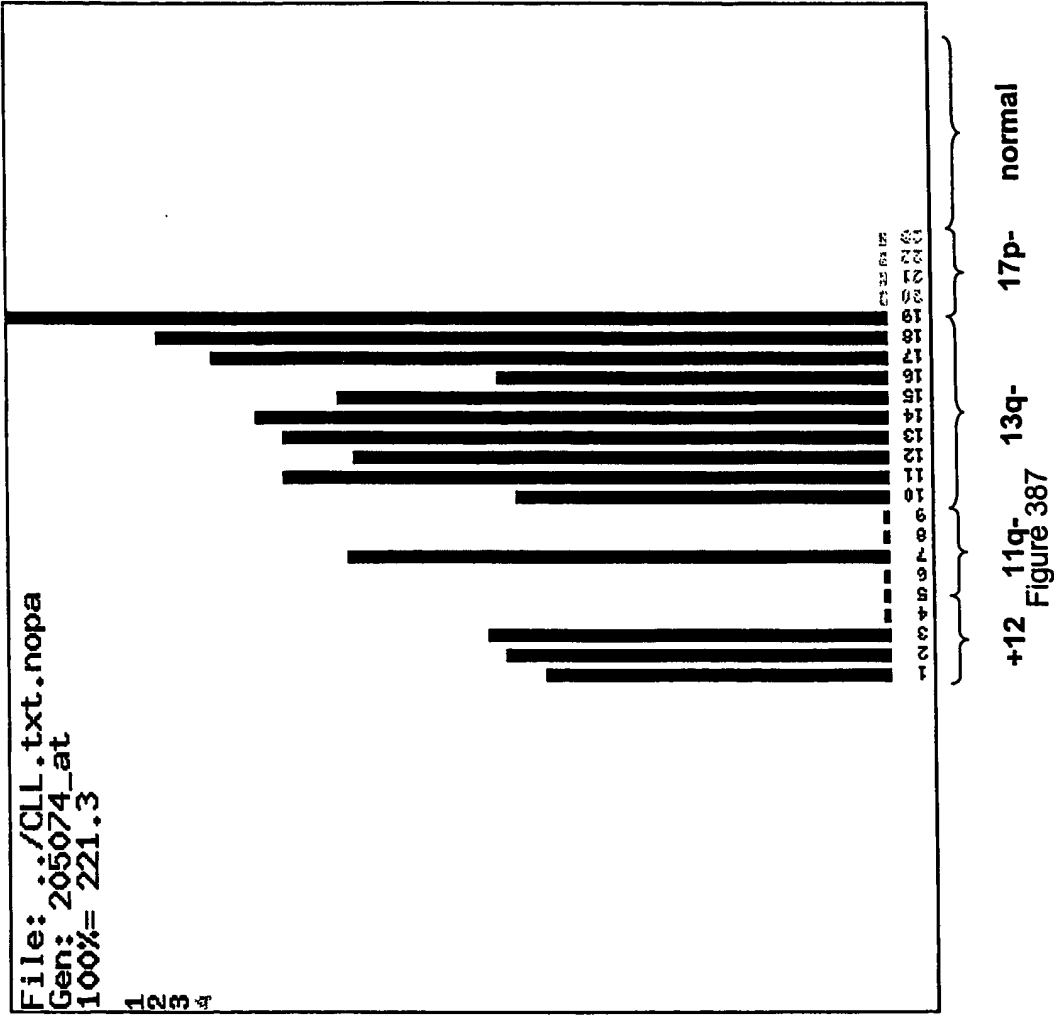


+12 11q- 13q- 17p- normal

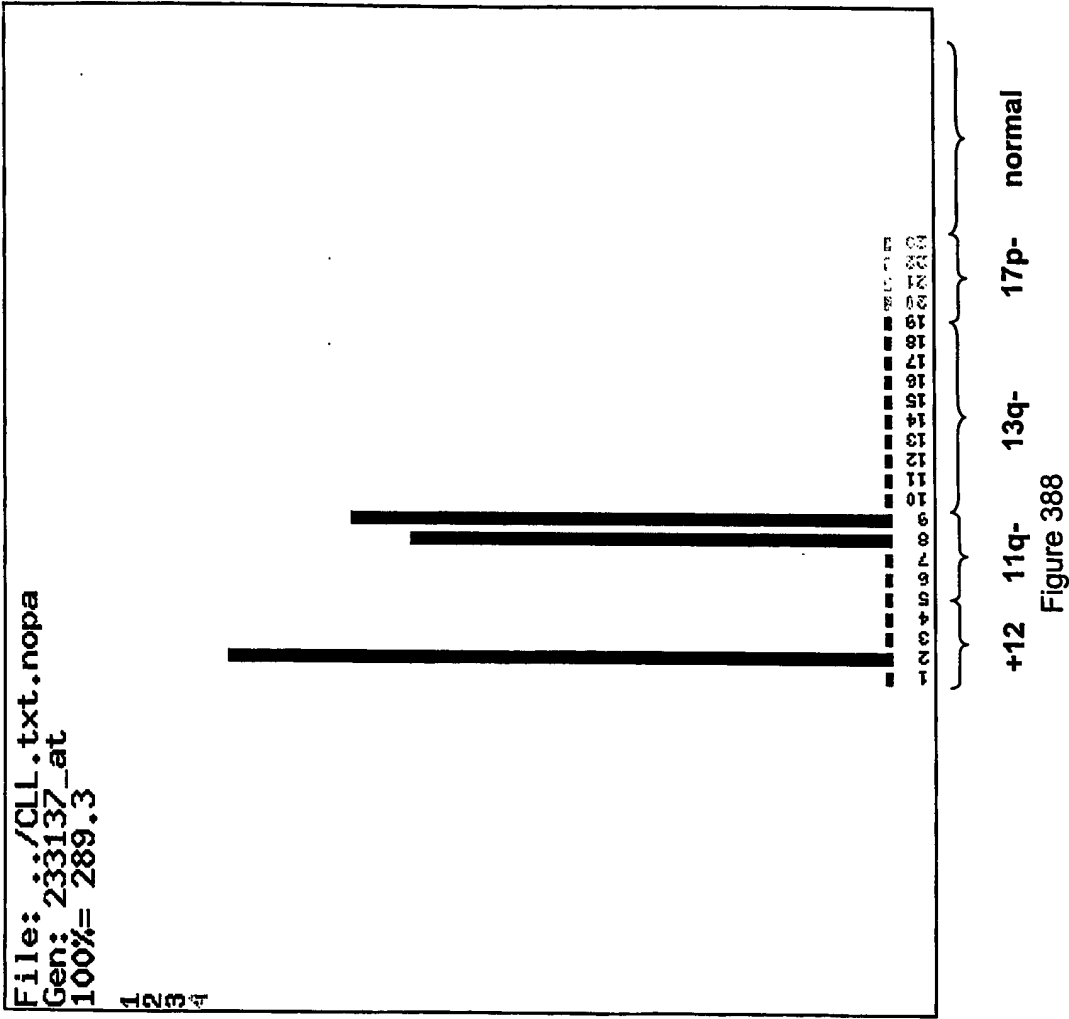
Figure 386



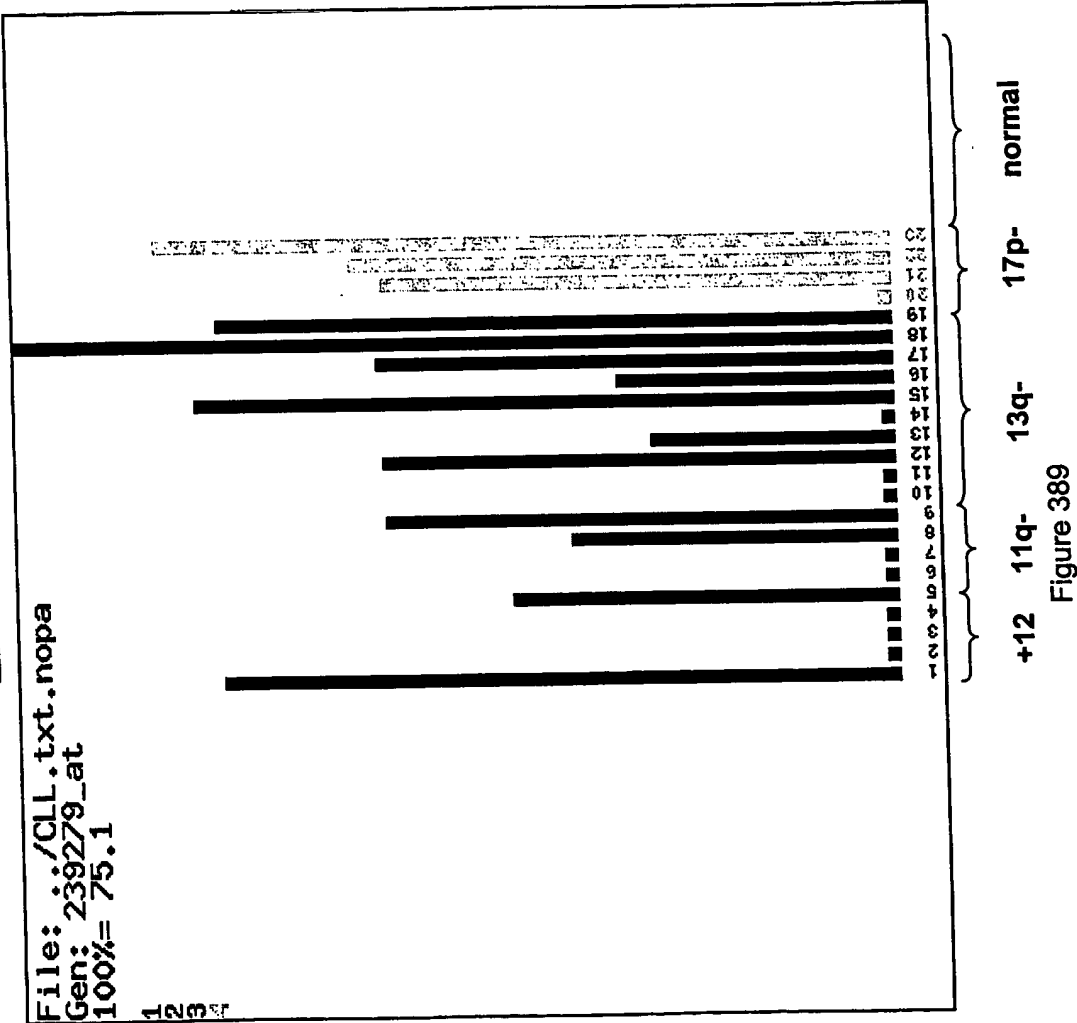
205074\_at, SLC22A5, 13q- vs. 17p-



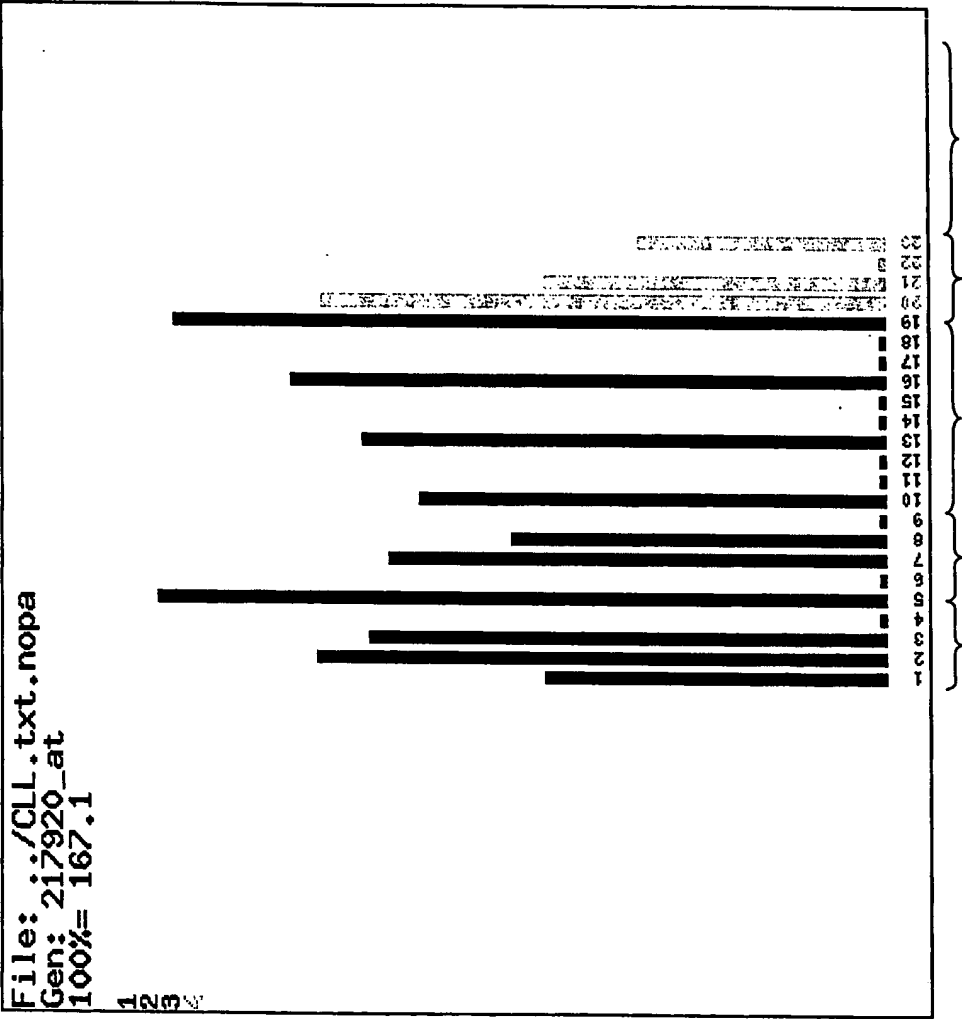
233137\_at, 13q- vs. normal



239279\_at, 13q- vs. normal



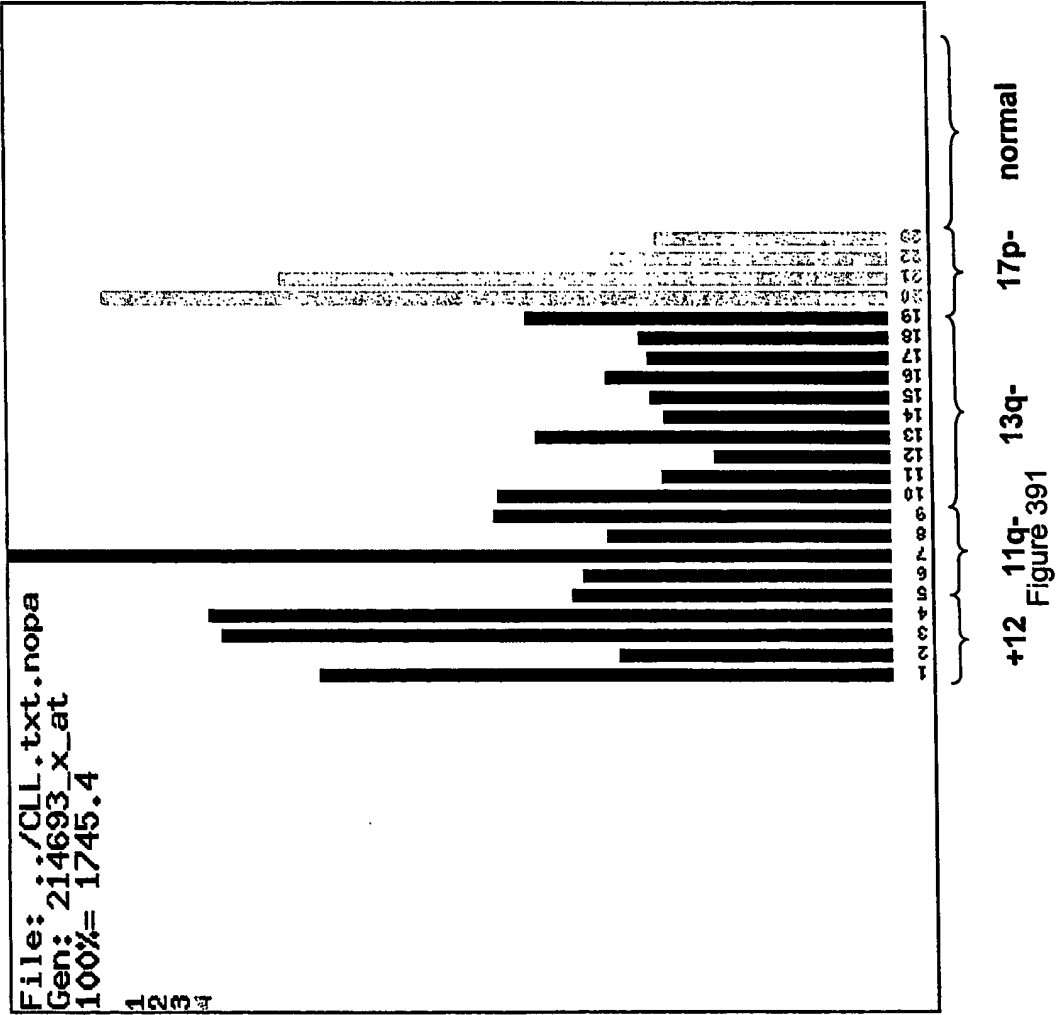
217920\_at, 13q- vs. normal



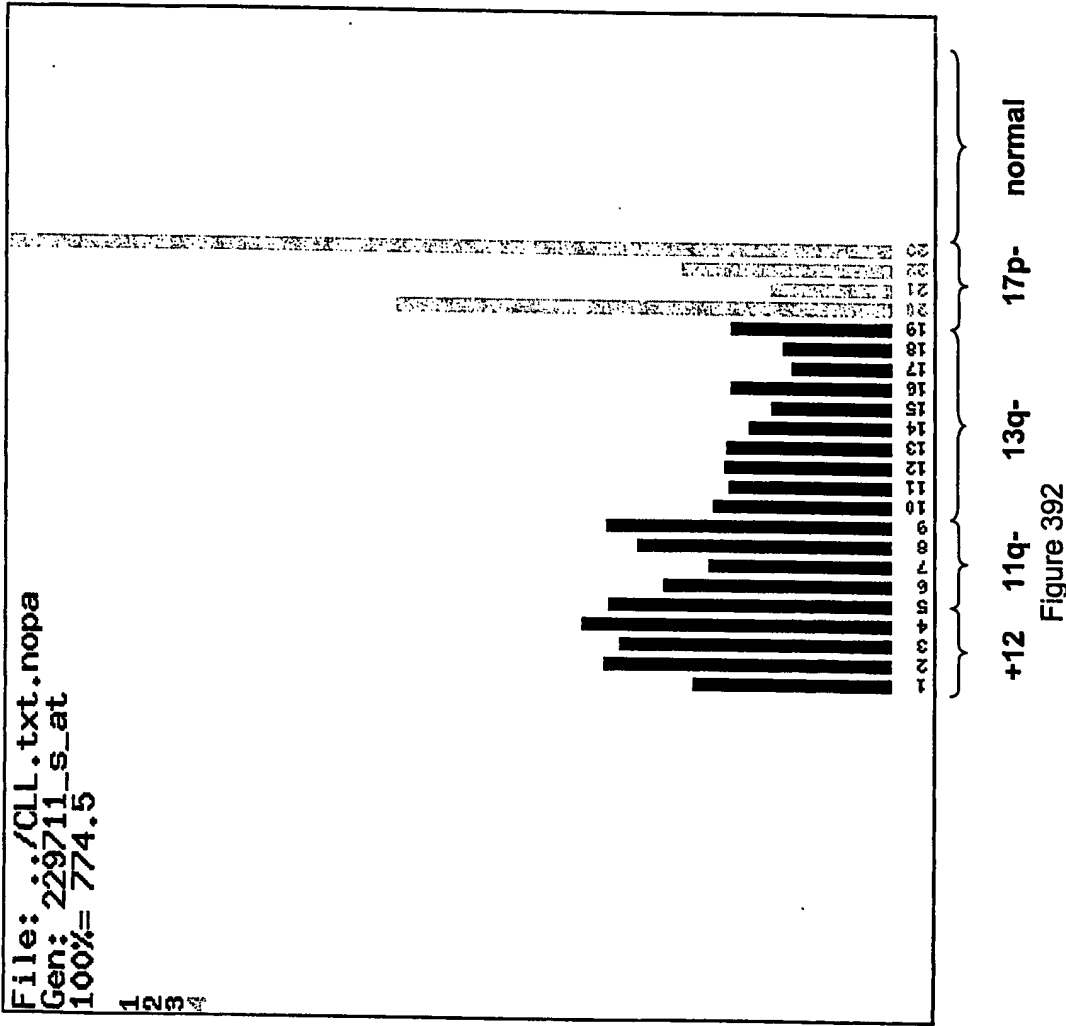
+12 11q- 13q- 17p- normal

Figure 390

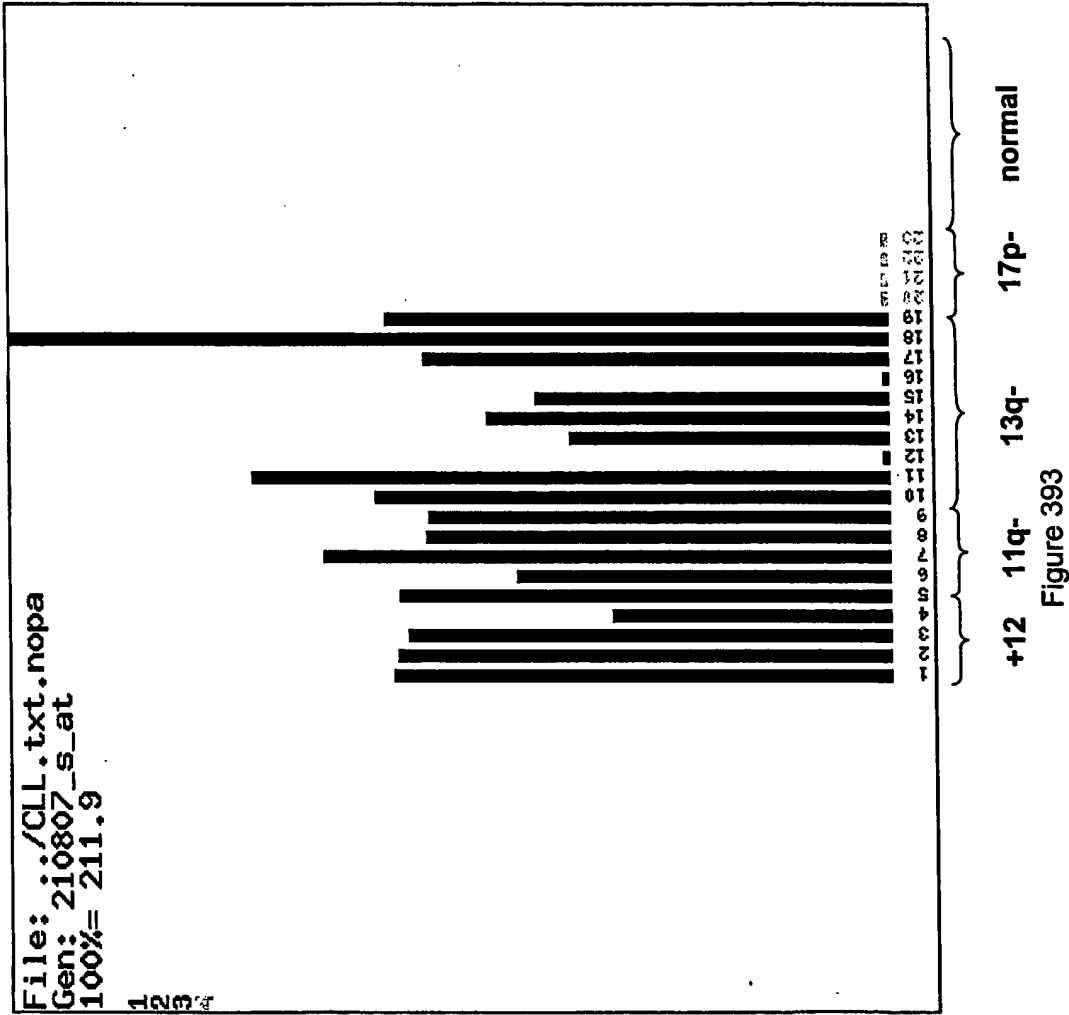
214693\_x\_at, DJ328E19.C1.1, 13q- vs. normal



229711\_s\_at, MGC5370, 13q- vs. normal

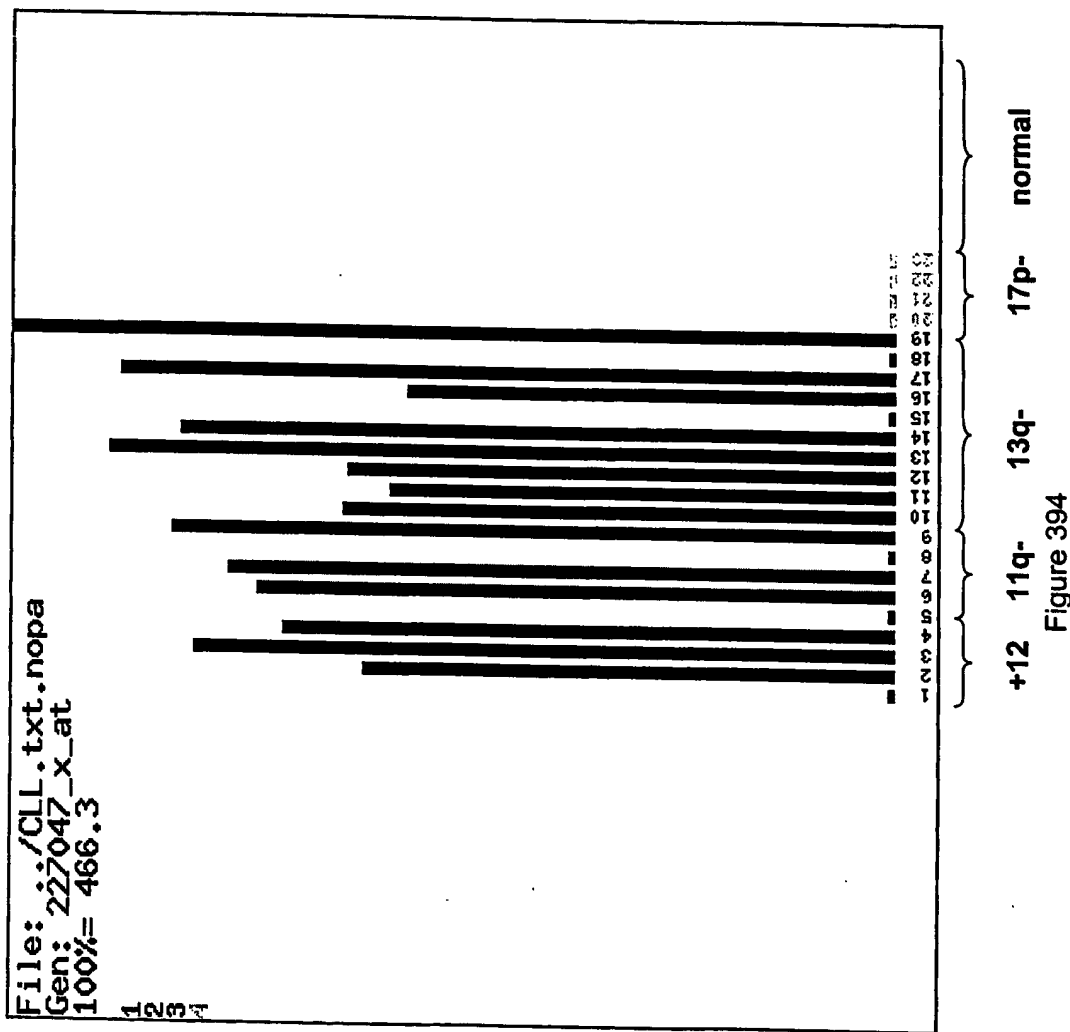


210807\_s\_at, SLC16A7, 17p- vs. all others



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227047\_x\_at, KIAA1538, 17p- vs. all others





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# 243493\_at, 17p- vs. all others

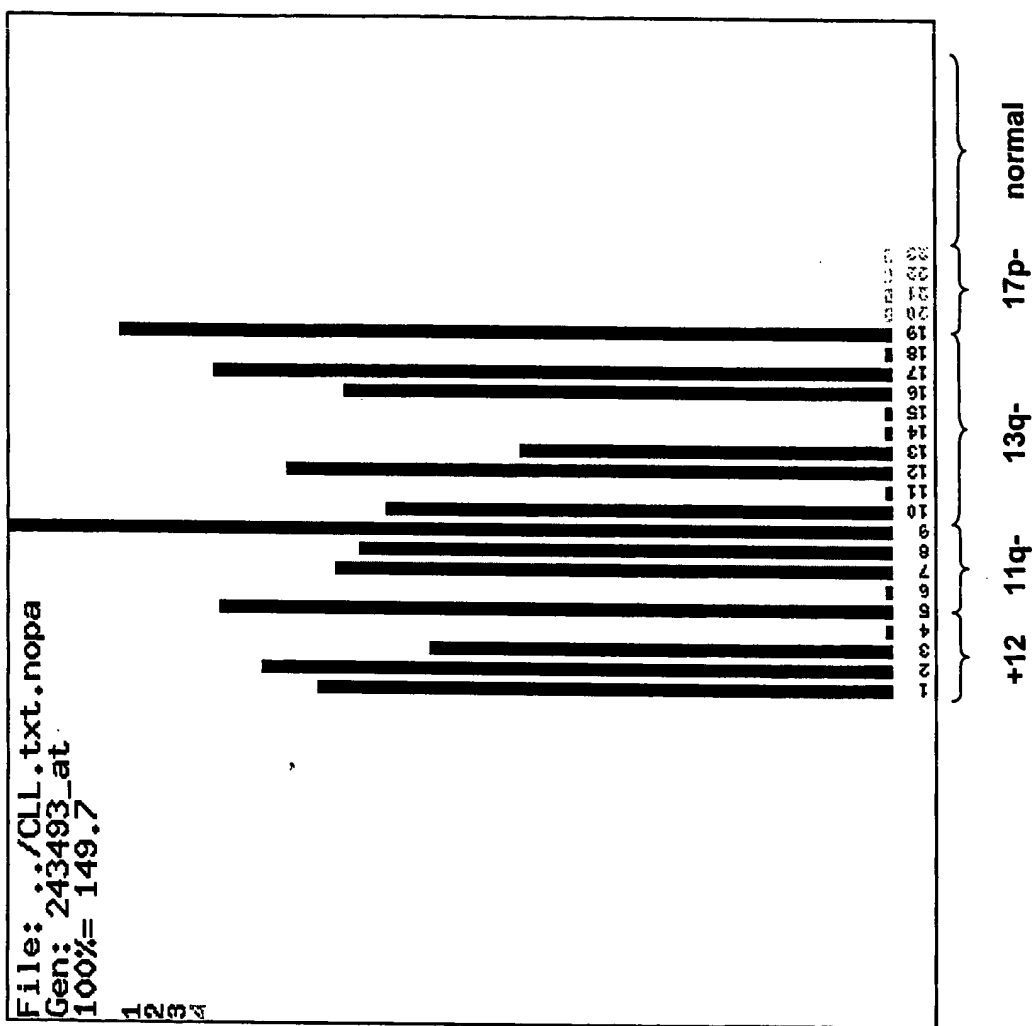


Figure 395

239263\_at, 17p- vs. normal

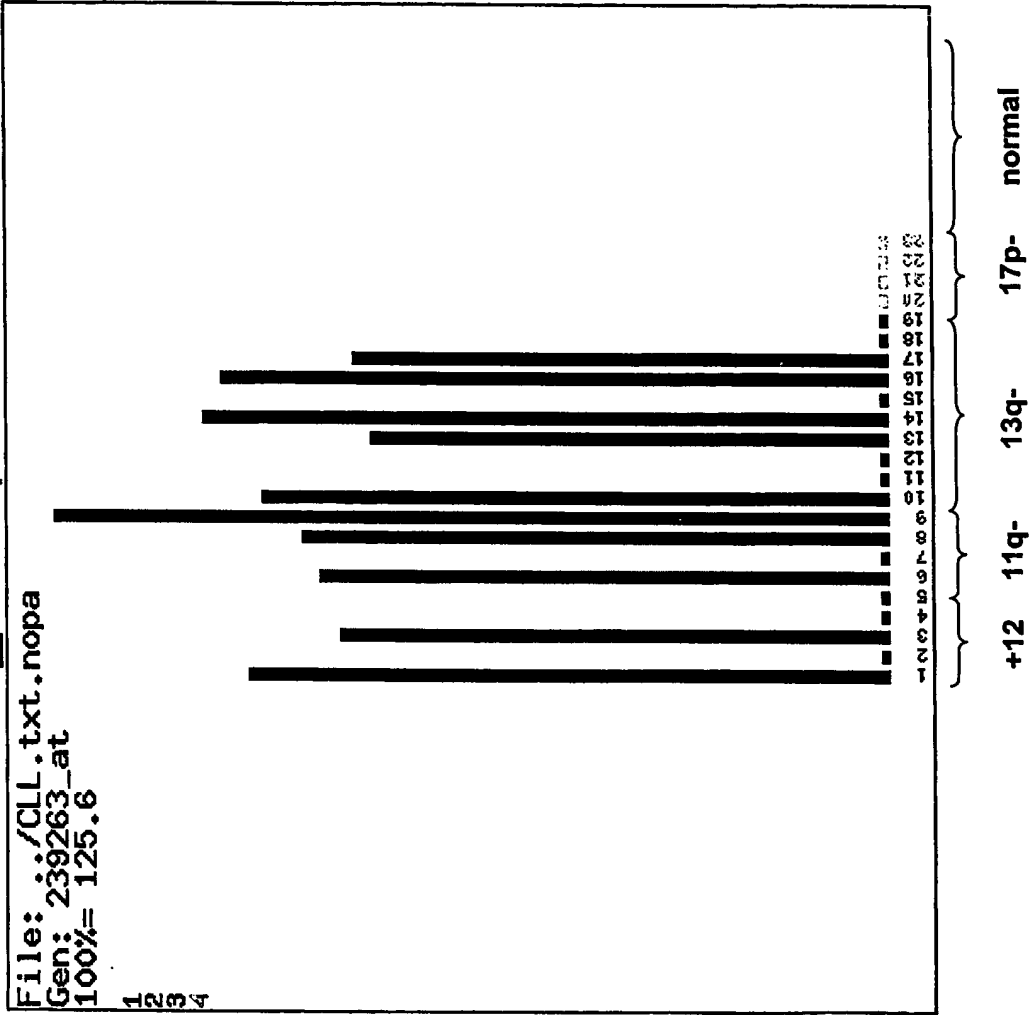


Figure 396

217920\_at, normal vs. all others

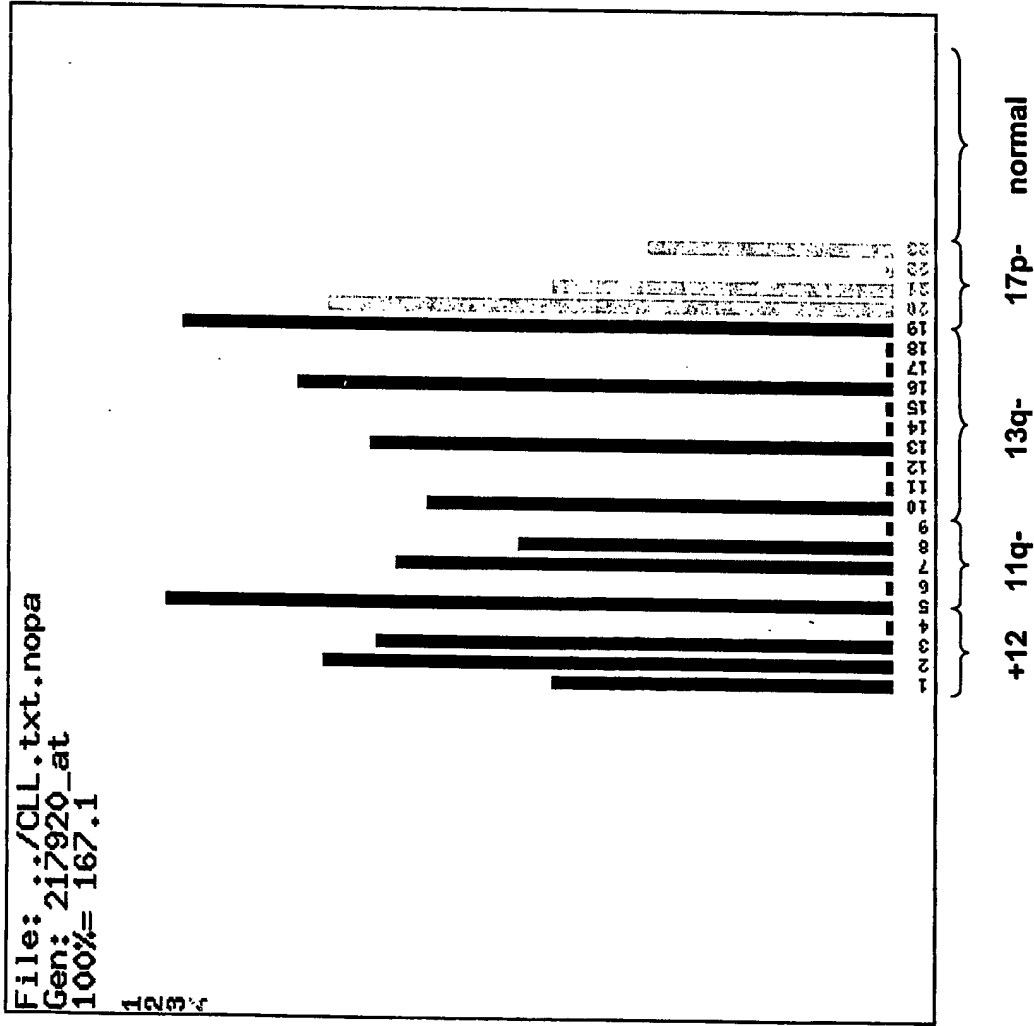


Figure 397

239279\_at, normal vs. all others

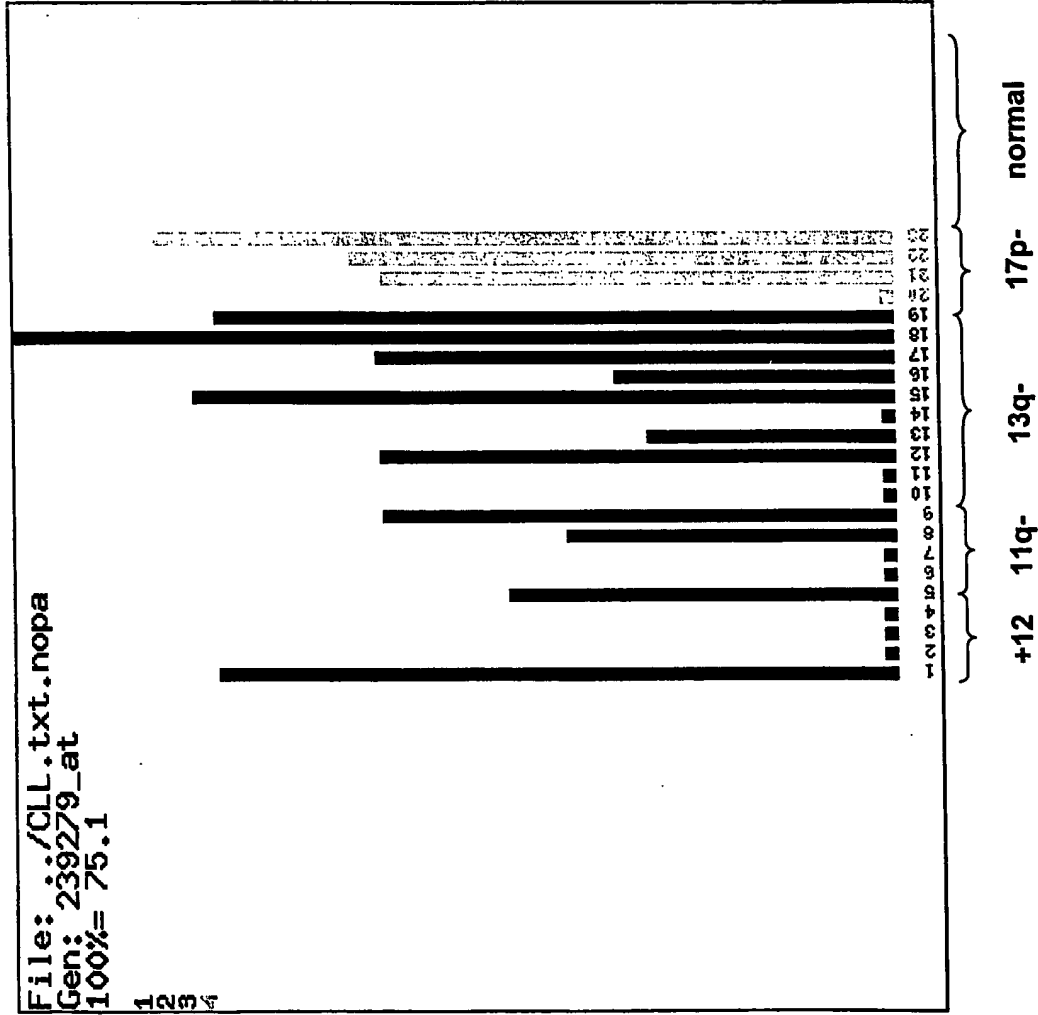


Figure 398

231945\_at, KIAA1275, normal vs. all others

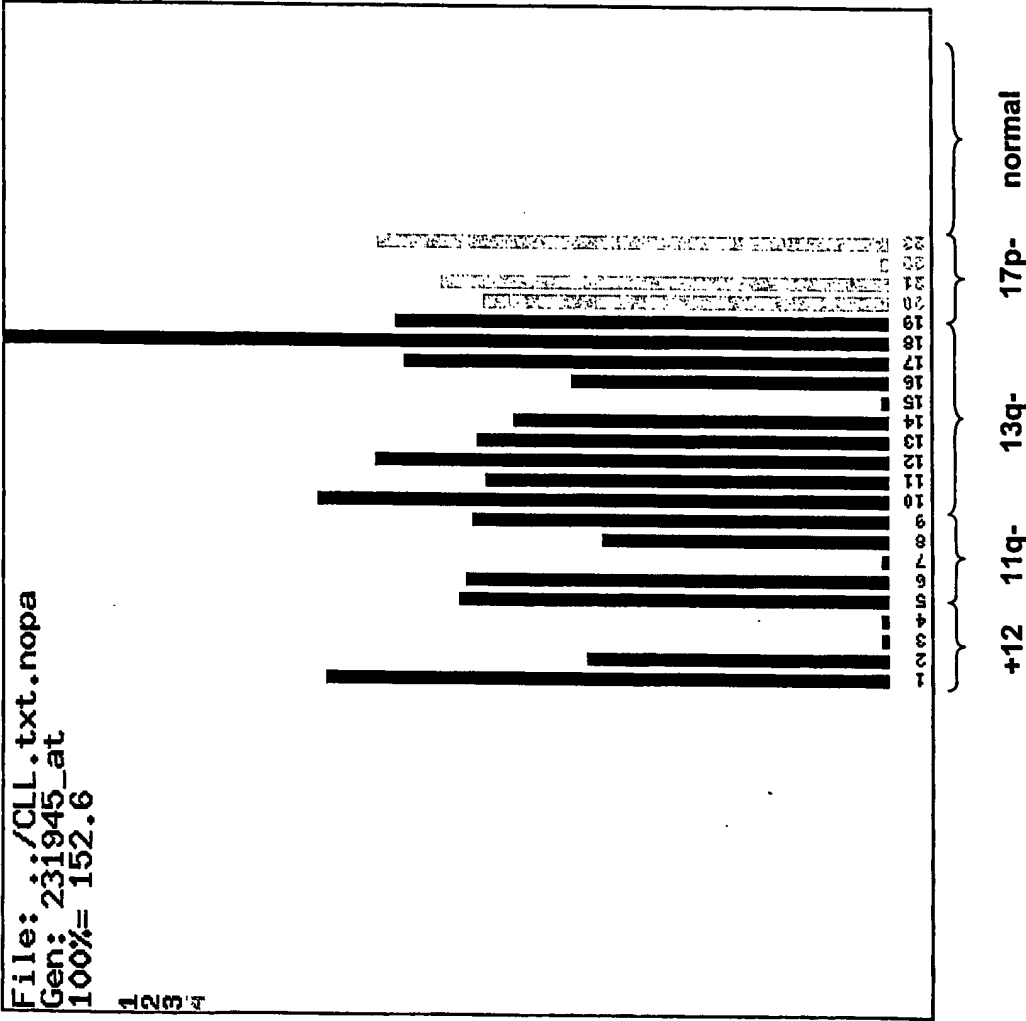
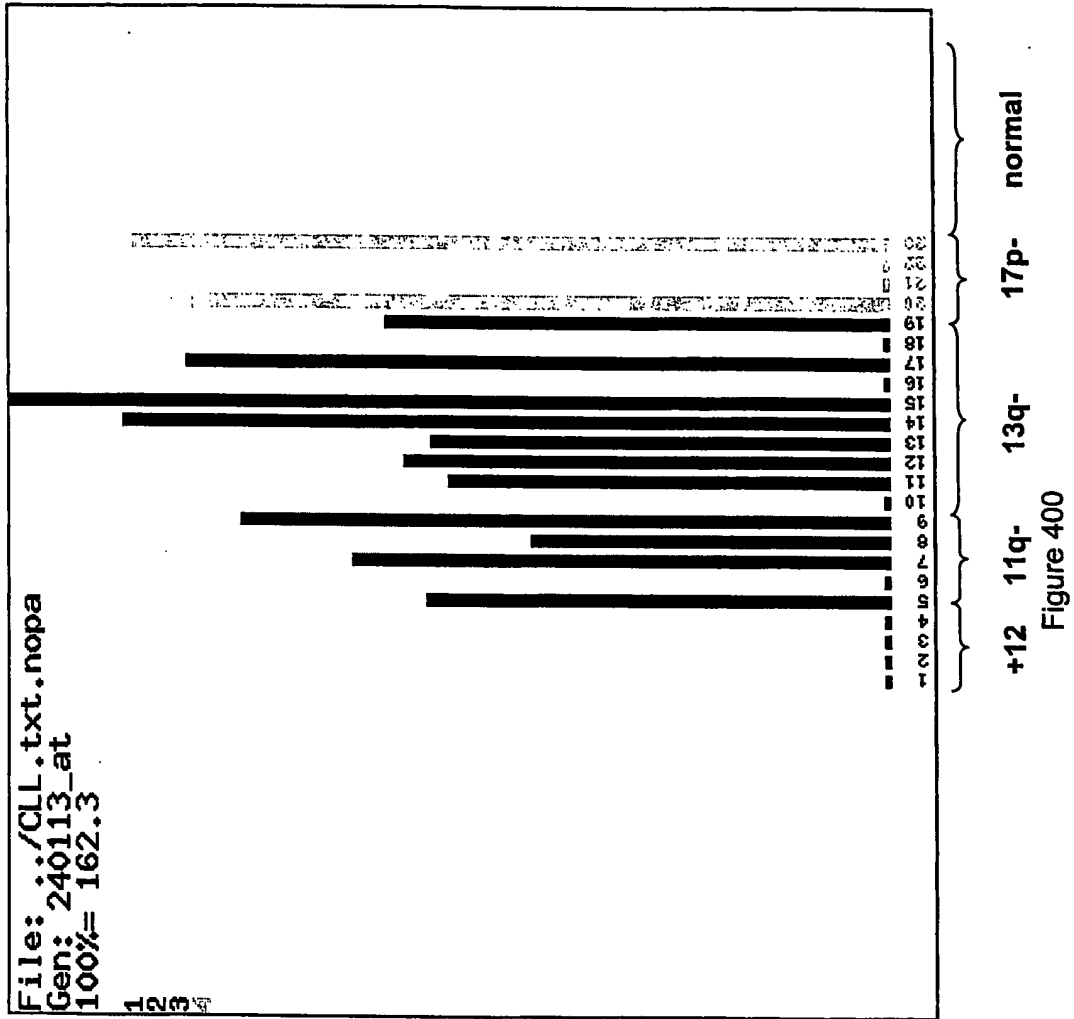


Figure 399

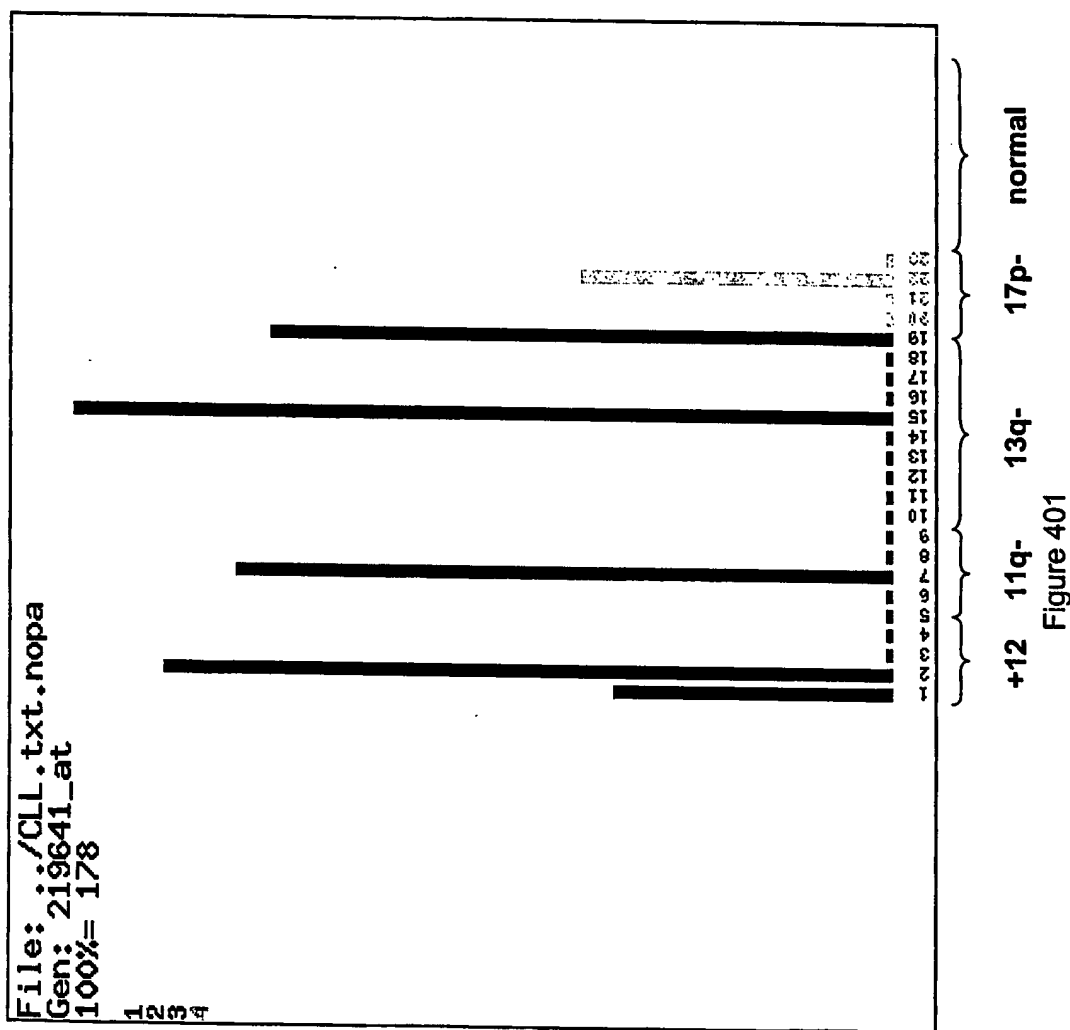
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# 240113\_at, normal vs. all other



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219641\_at, FLJ10103, normal vs. all others



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219457\_s\_at, RIN3, normal vs. all others

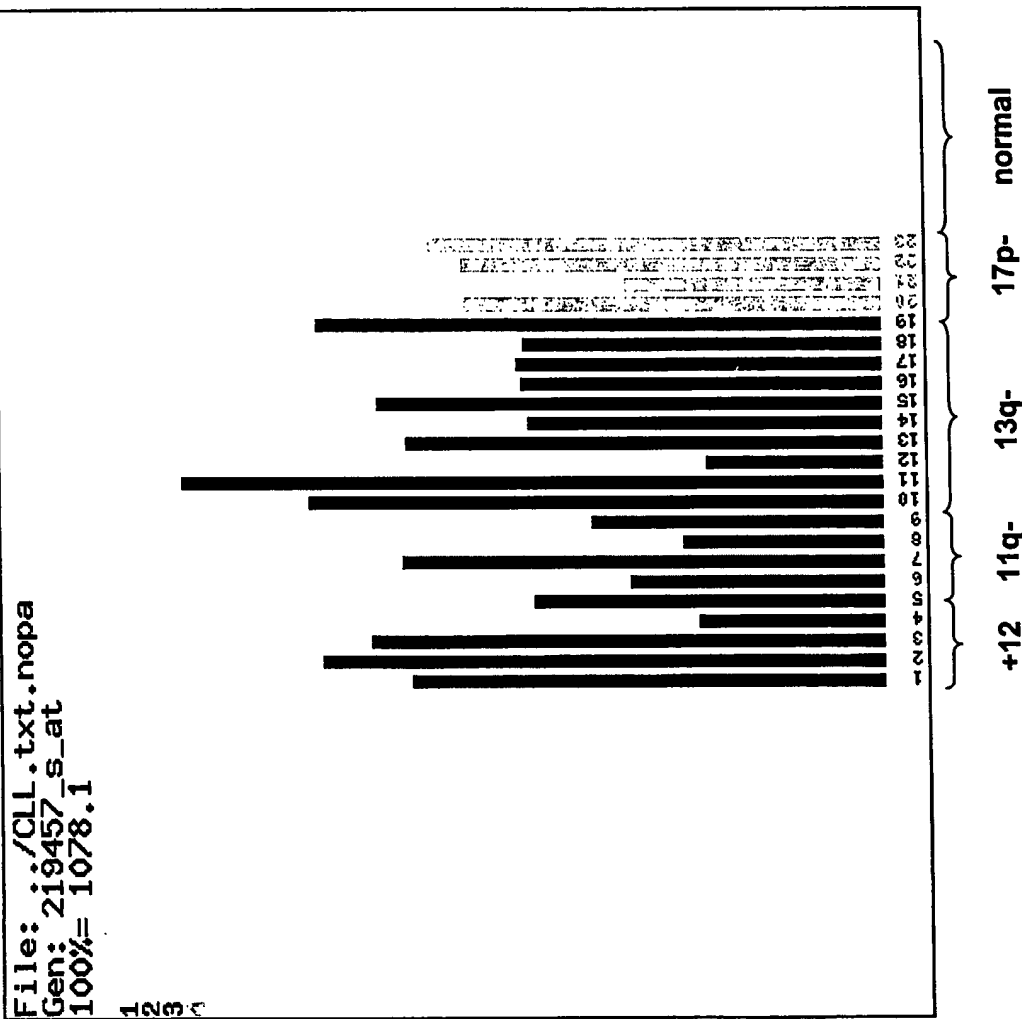


Figure 402



228408\_s\_at, FLJ10498, normal vs. all others

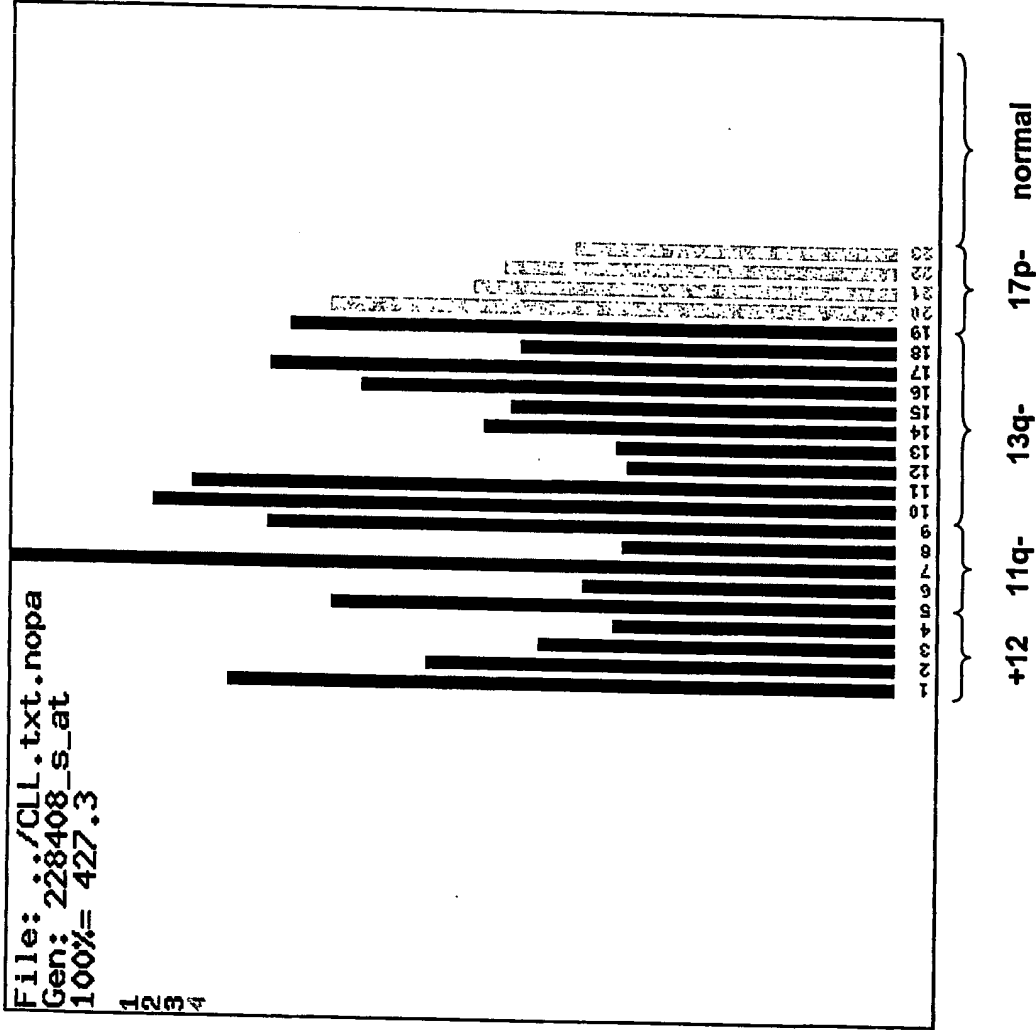


Figure 403

235052\_at, normal vs. all others

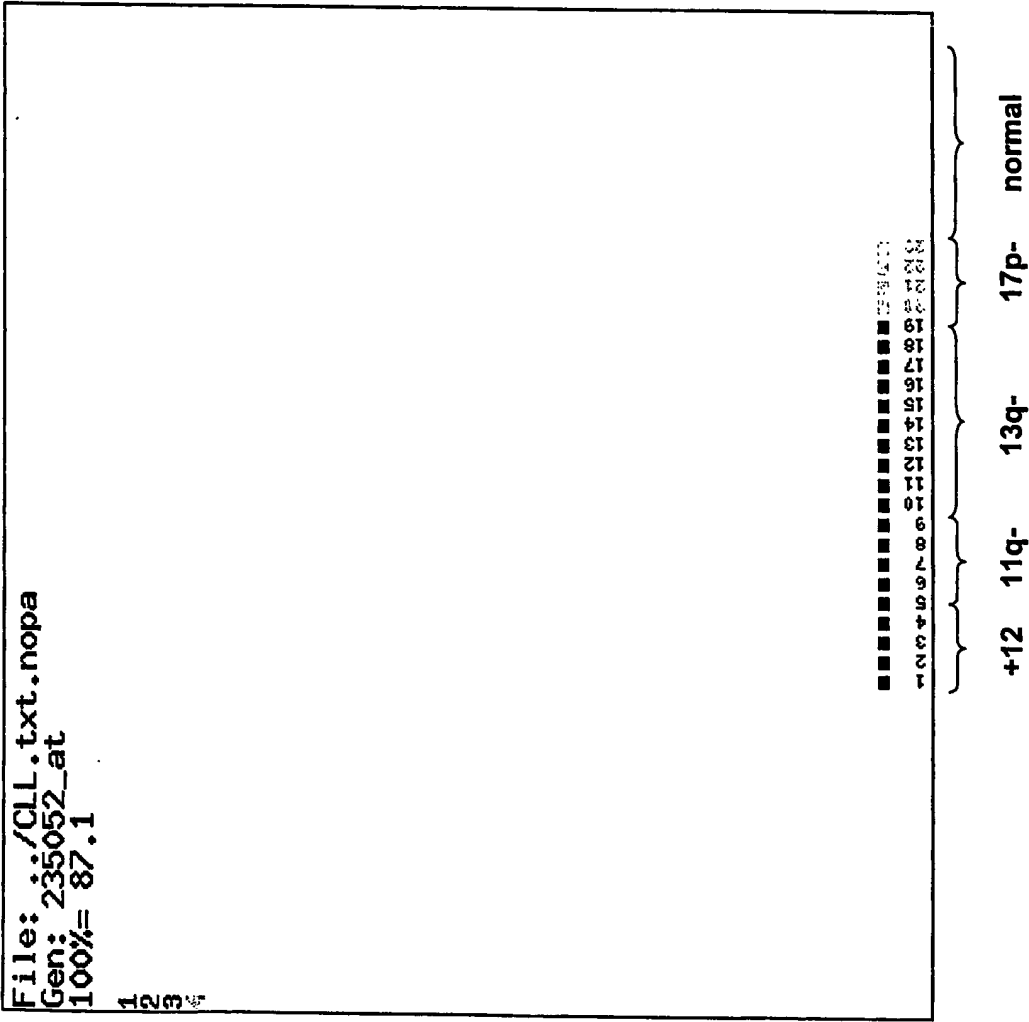


Figure 404

# 219013\_at, FLJ21634, ALL vs. all others

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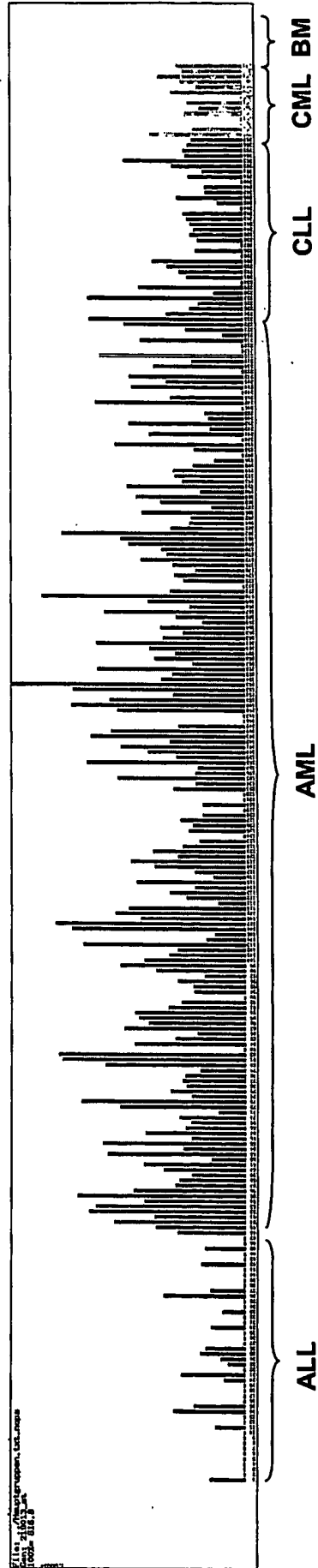


Figure 405

243362\_s\_at, LEF1, ALL vs. all others

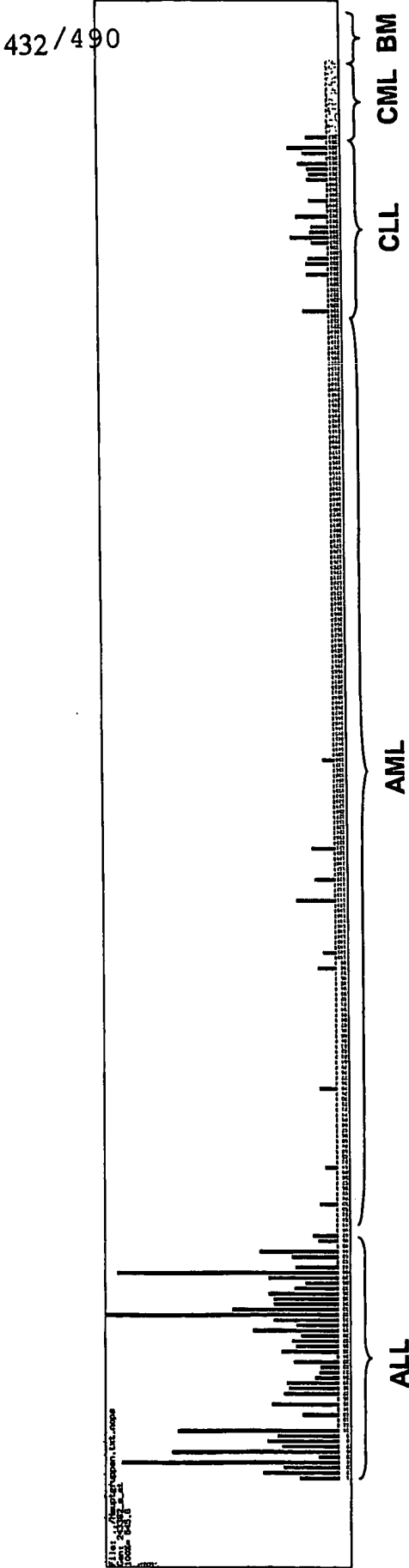


Figure 406

# 204215\_at, MGC4175, ALL vs. AML

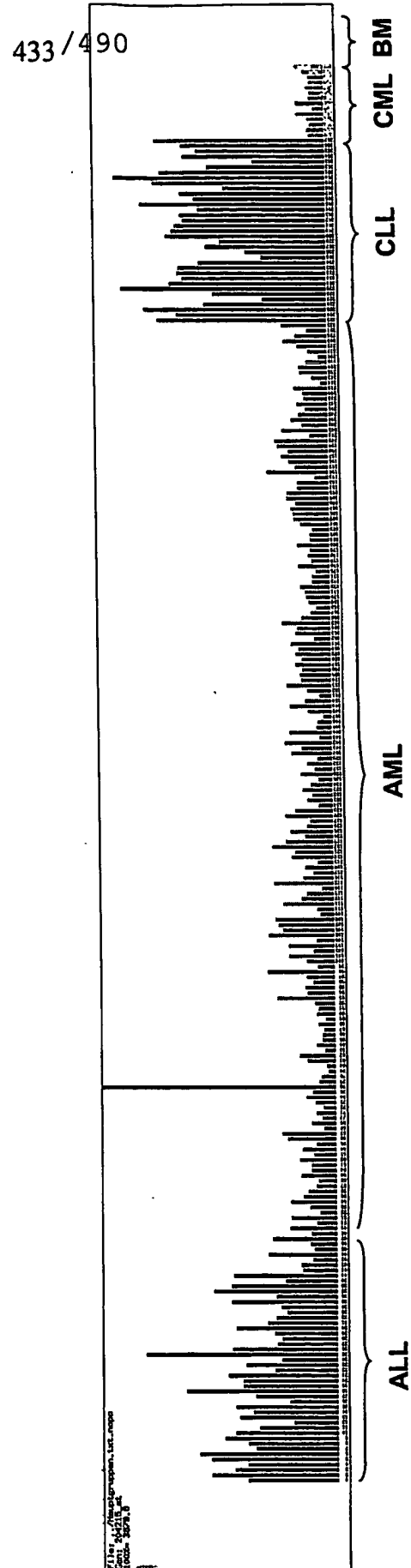


Figure 407

# 225927\_at, MAP3K1, ALL vs. CLL

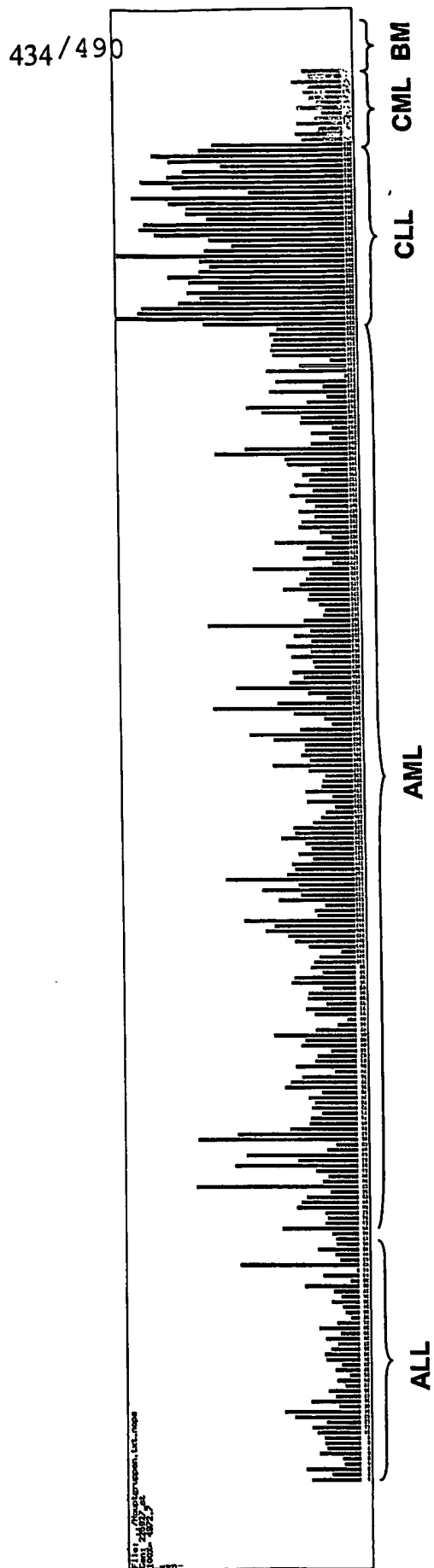


Figure 408

# 205557\_at, BPI, ALL vs. CML

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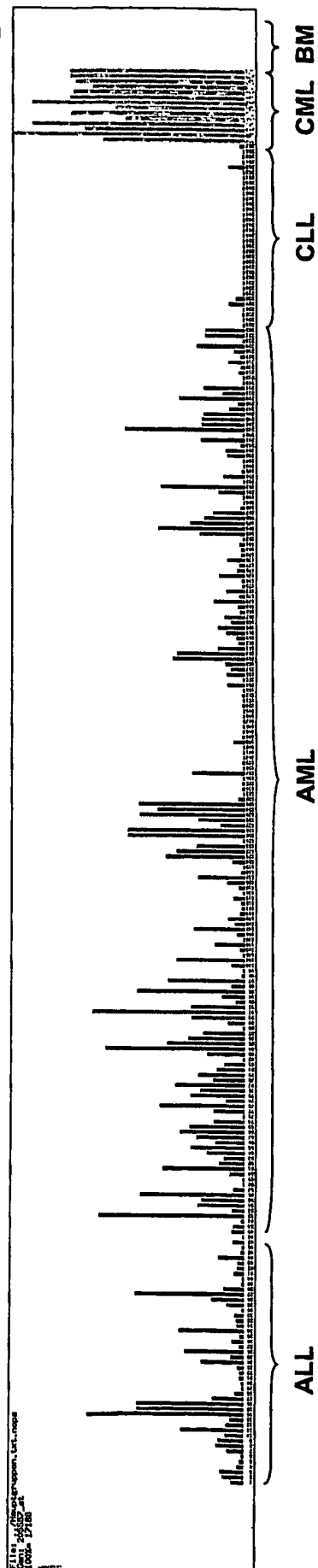


Figure 409

223280\_x\_at, MS4A6A, ALL vs. normal BM

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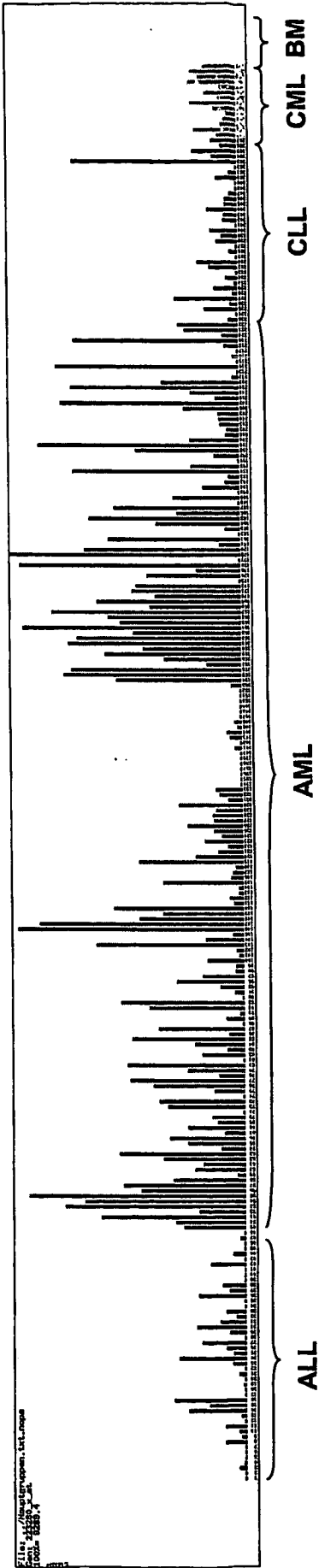


Figure 410



224356\_x\_at, MS4A6A, ALL vs. normal BM

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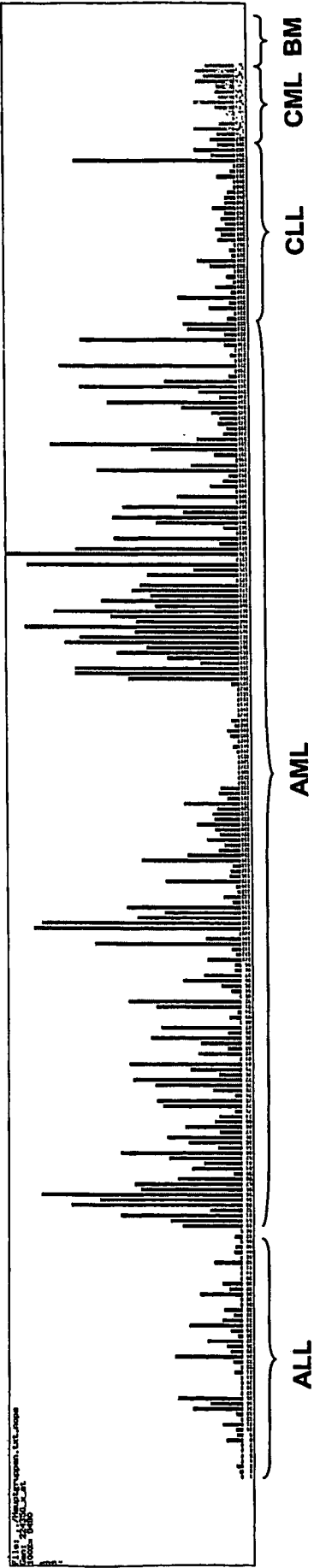


Figure 411

218916\_at, FLJ23436, ALL vs. normal BM

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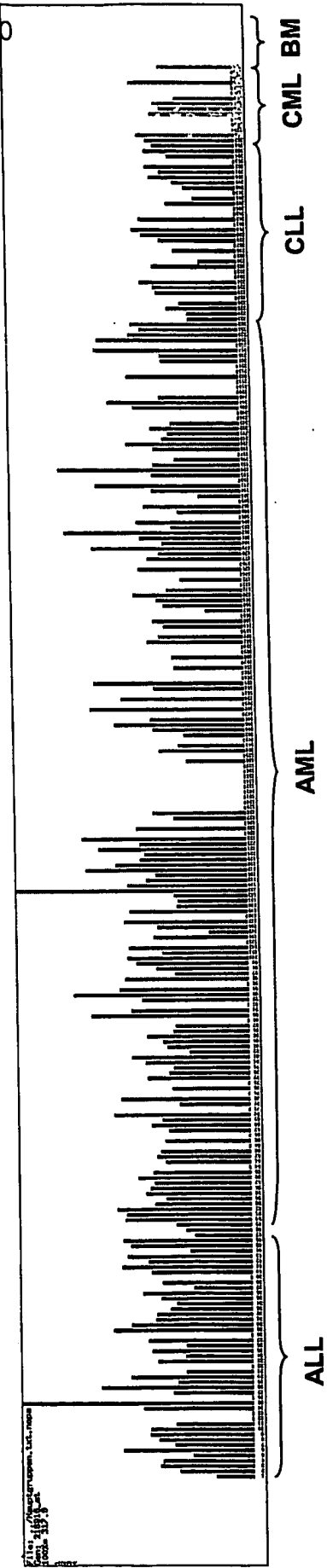


Figure 412

# 221969\_at, PAX5, AML vs. all others

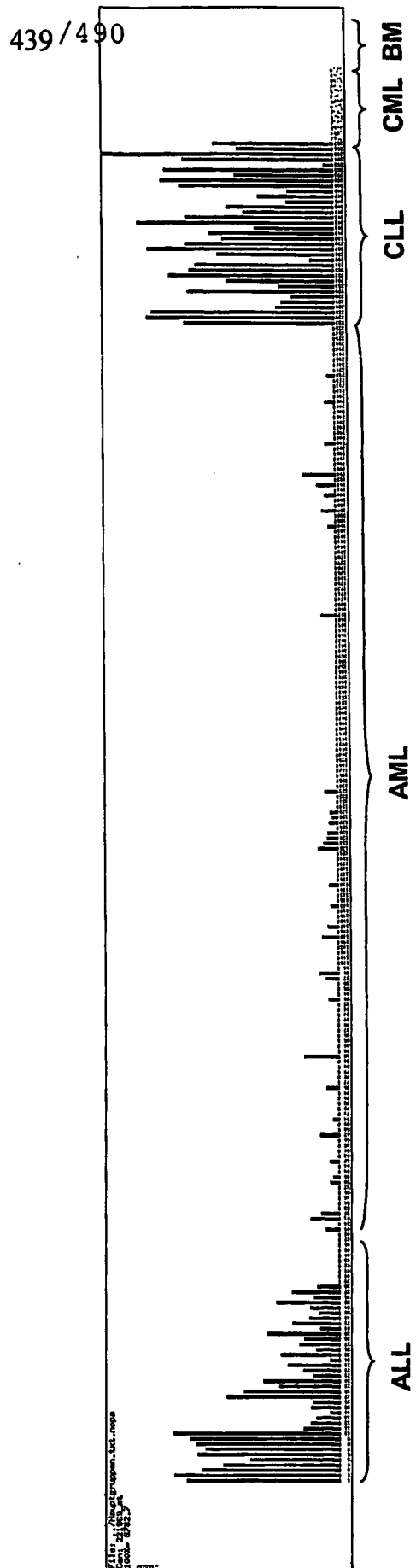


Figure 413

206398\_s\_at, CD19, AML vs. Rest

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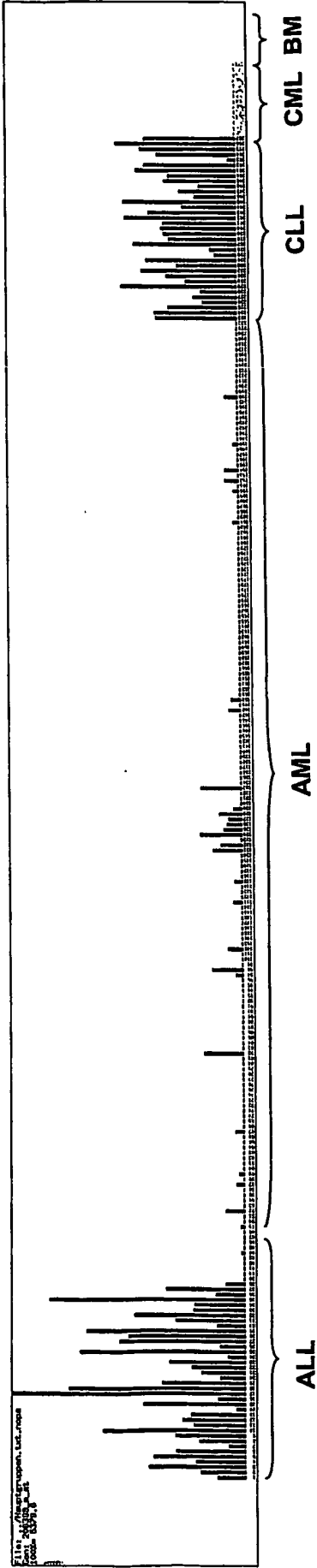


Figure 414

223514\_at, CARD11, AML vs. CLL

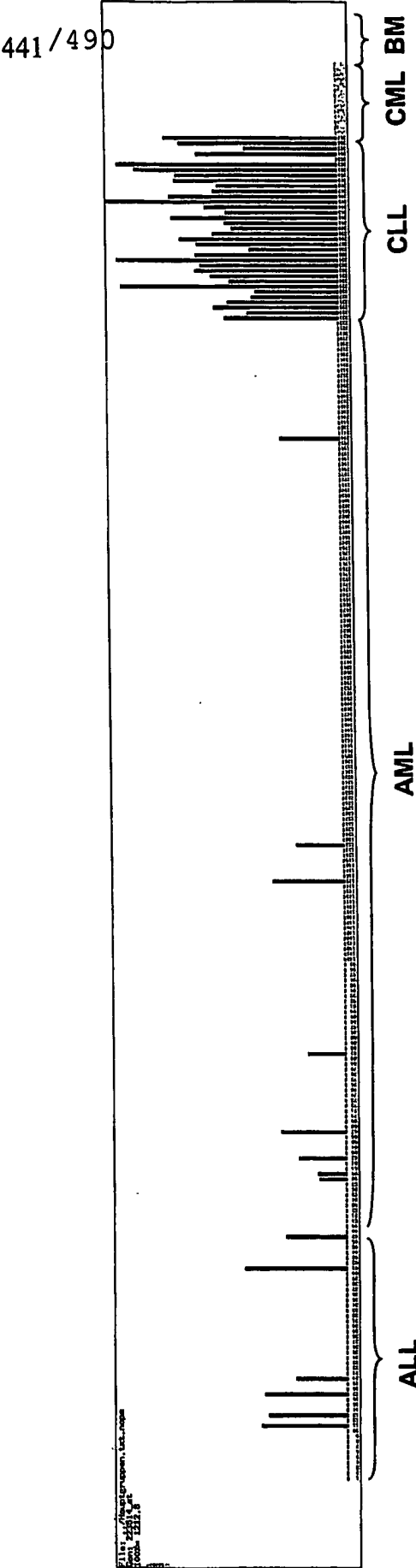


Figure 415

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207802\_at, SGP28, AML vs. CML

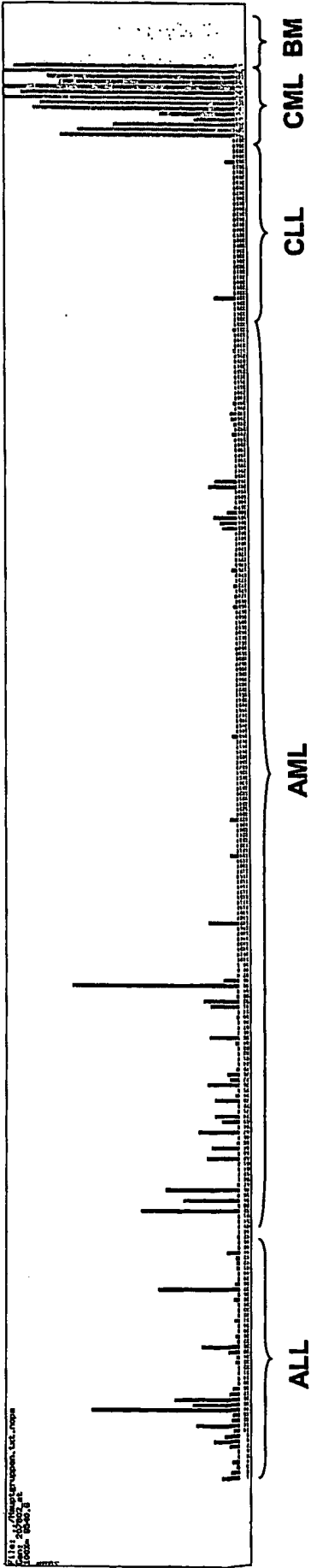


Figure 416

209772\_s\_at, CD24, AML vs. CML

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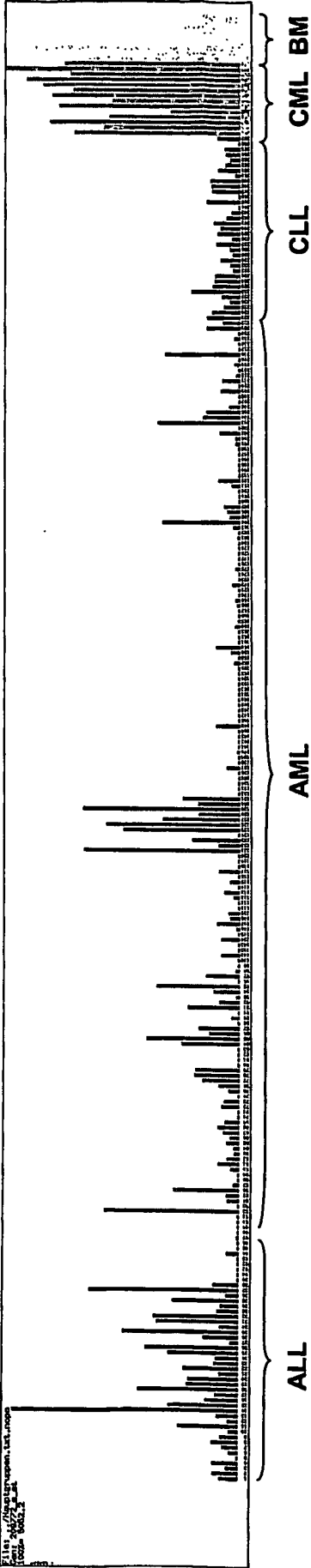


Figure 417

206676\_at, CEACAM8, AML vs. CML

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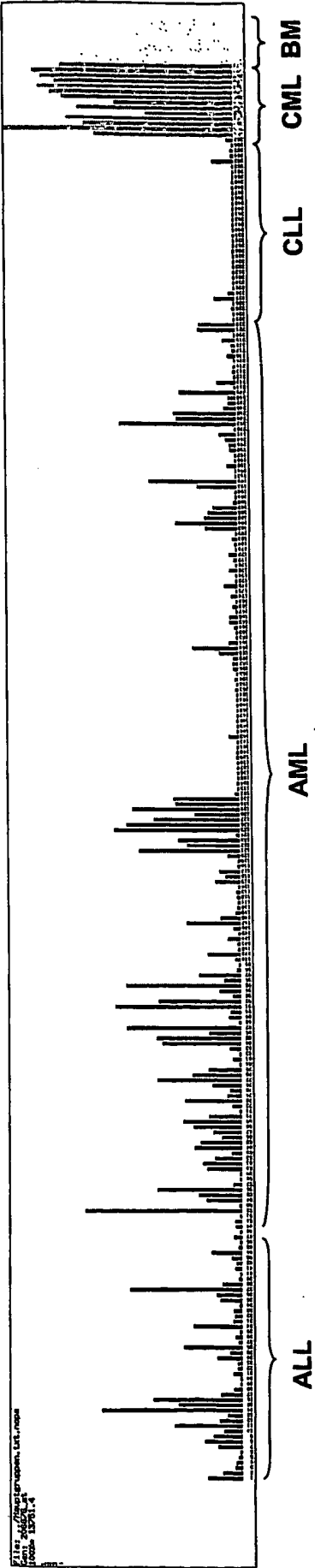


Figure 418



203936\_s\_at, MMP9, AML vs. CML

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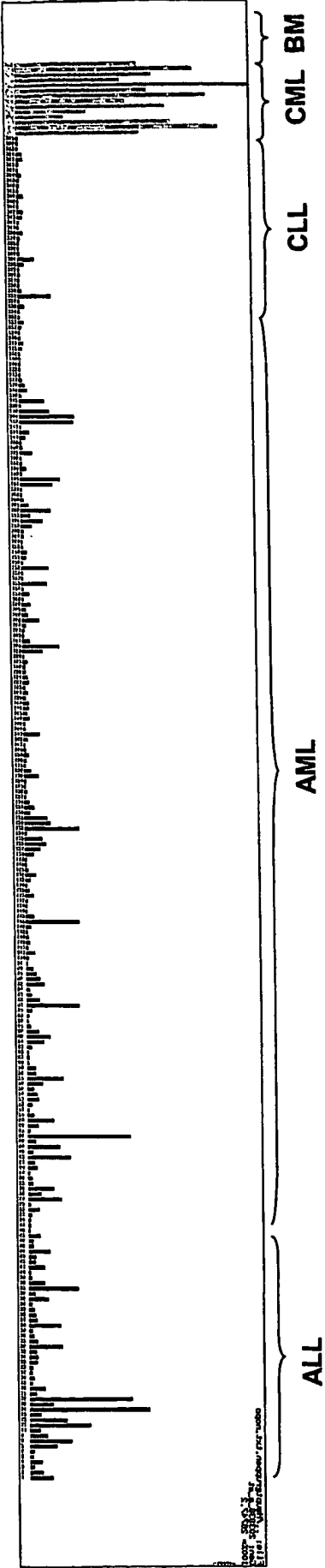


Figure 419

201029\_s\_at, MIC2, AML vs. CML

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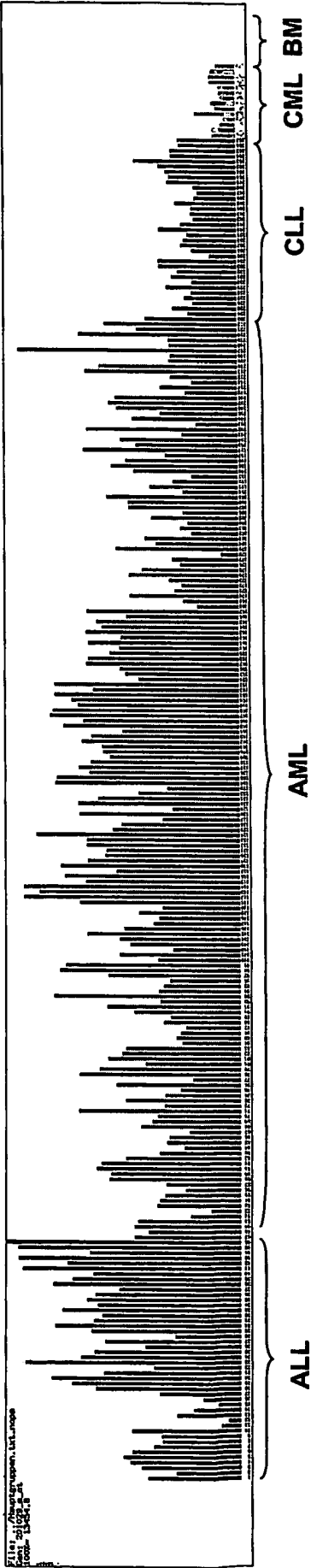


Figure 420

223894\_s\_at, FTS, AML vs. CML

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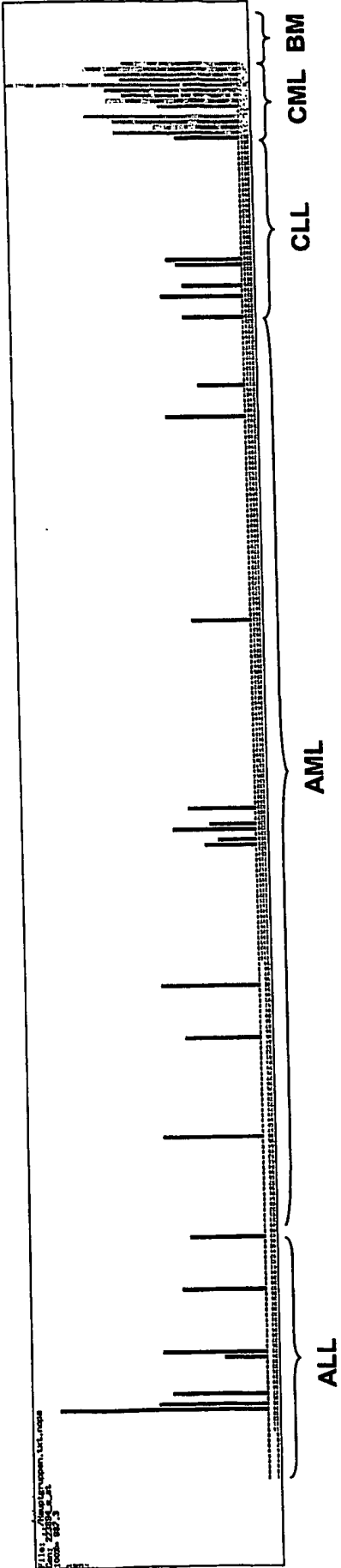


Figure 421

207269\_at, DEFA4, AML vs. CML

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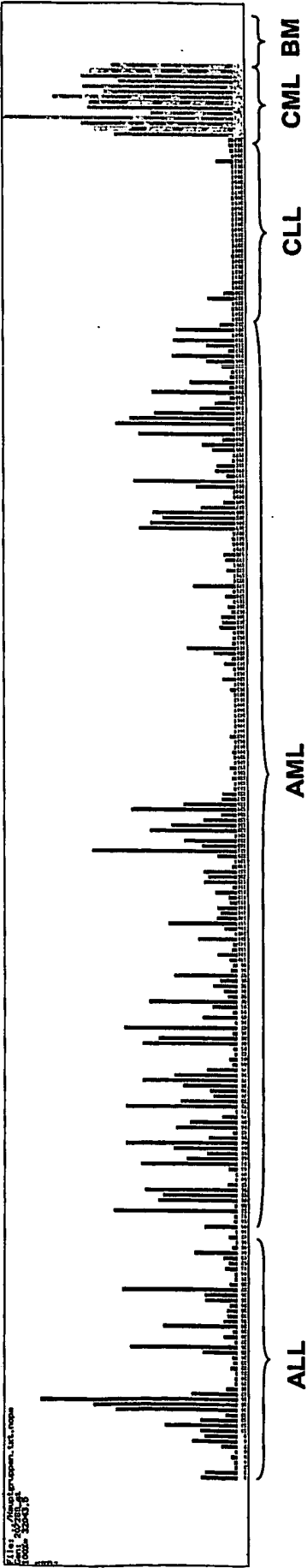
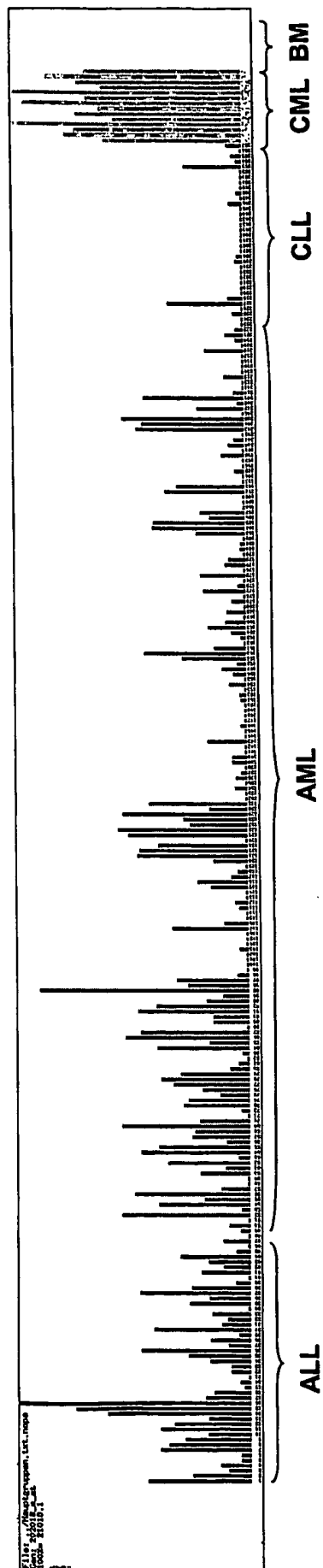


Figure 422

202018\_s\_at, LTF, AML vs. normal BM

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**Figure 423**

239287\_at, CLL vs. all others

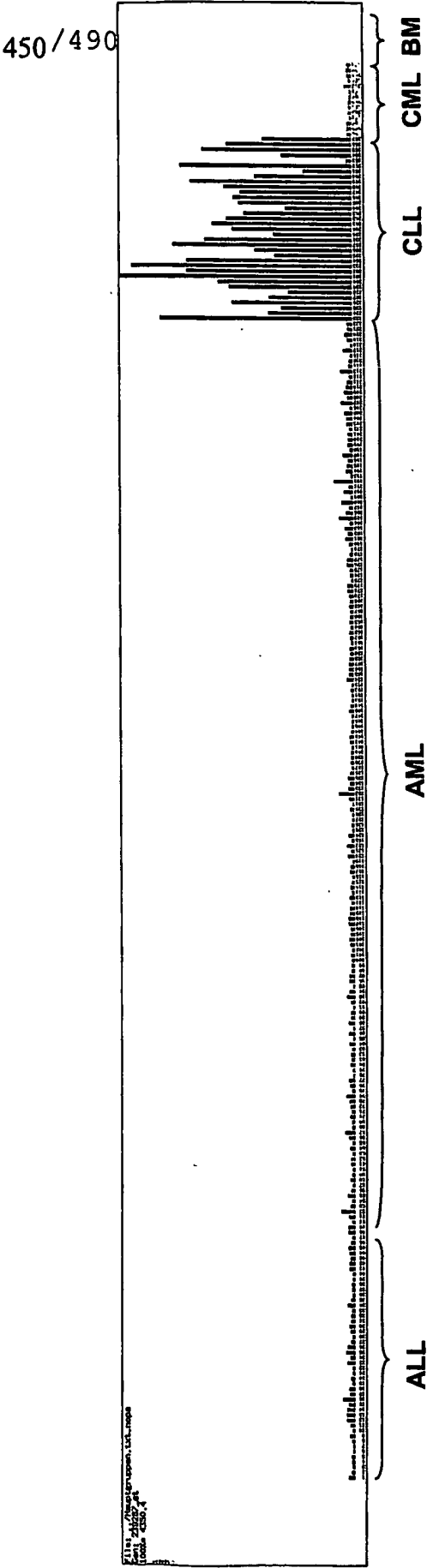


Figure 424

210254\_at, CLL vs. CML

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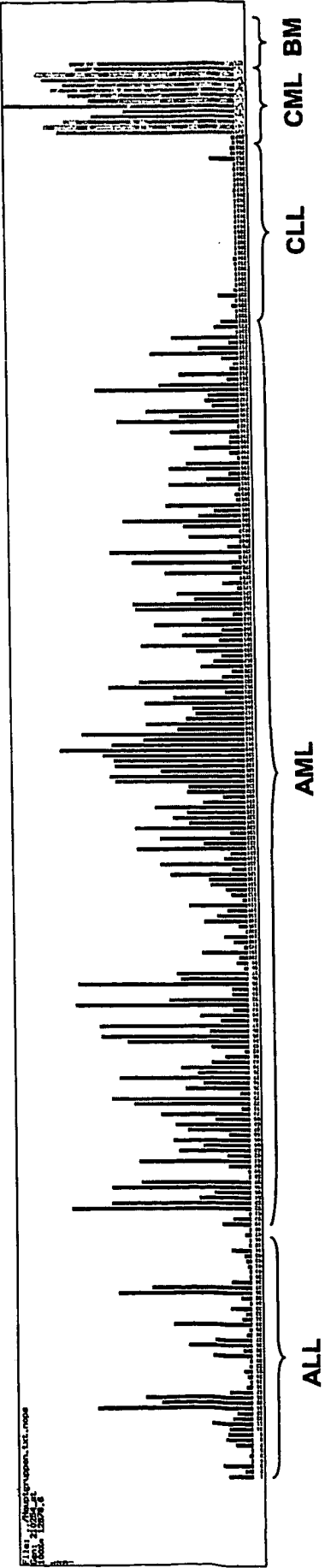


Figure 425

210613\_s\_at, SYNGR1, CLL vs. normal BM

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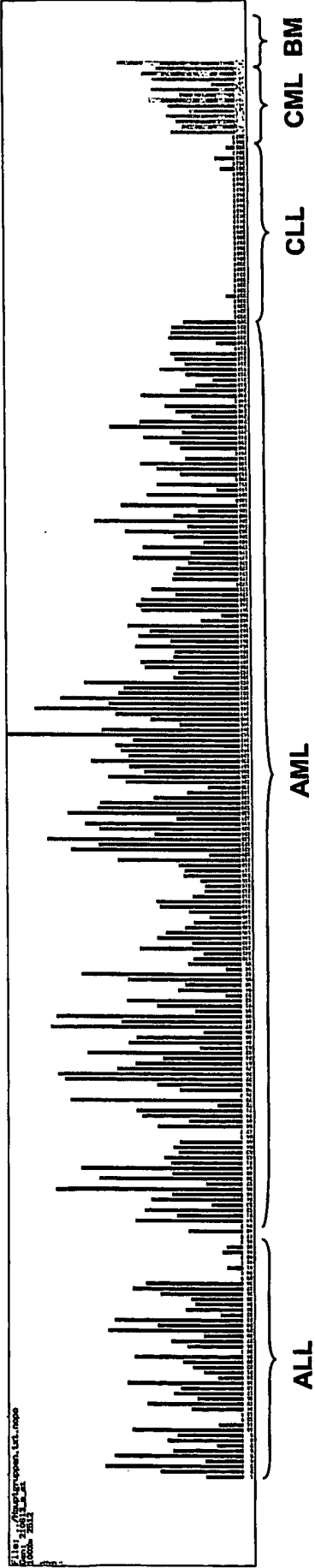


Figure 426



2055557\_at, BPI, CML vs. all others

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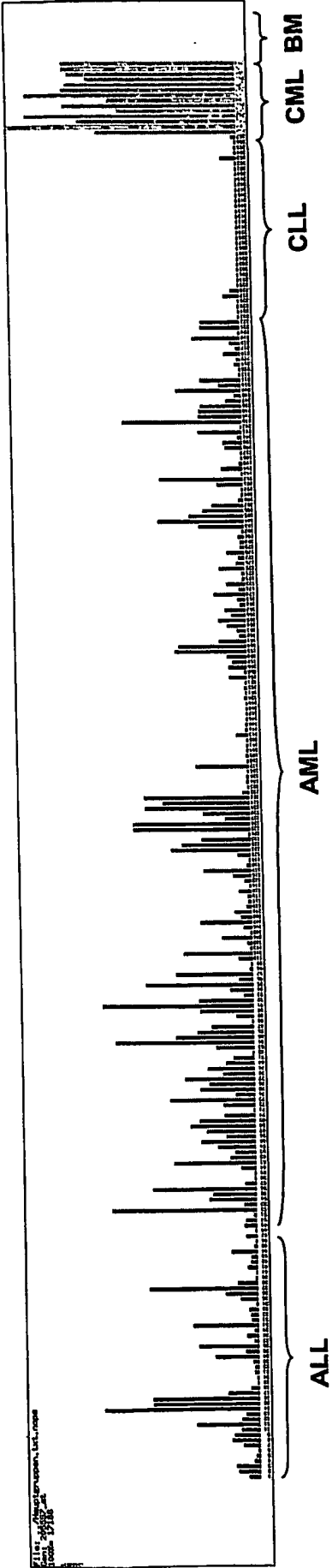


Figure 427

209772\_s\_at, CD24, CML vs. all others

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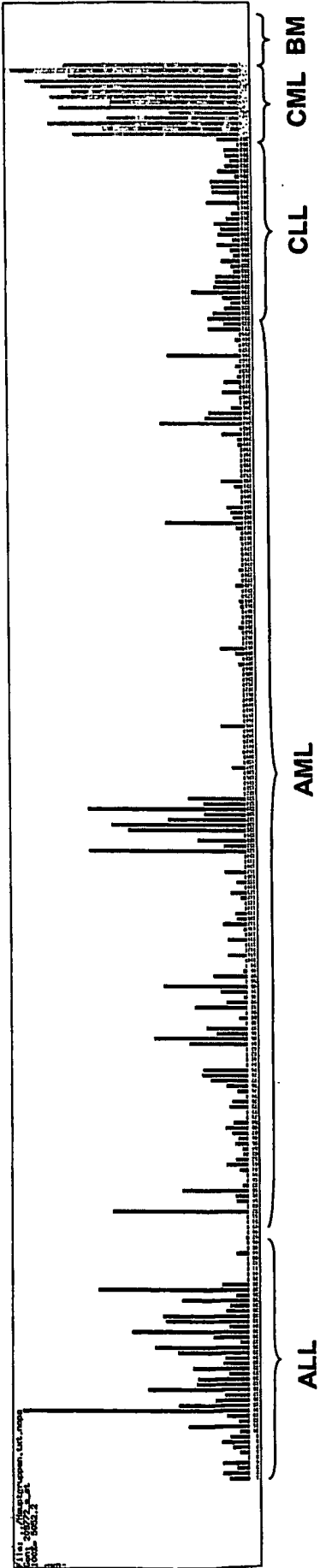


Figure 428

227198\_at, CML vs. normal BM

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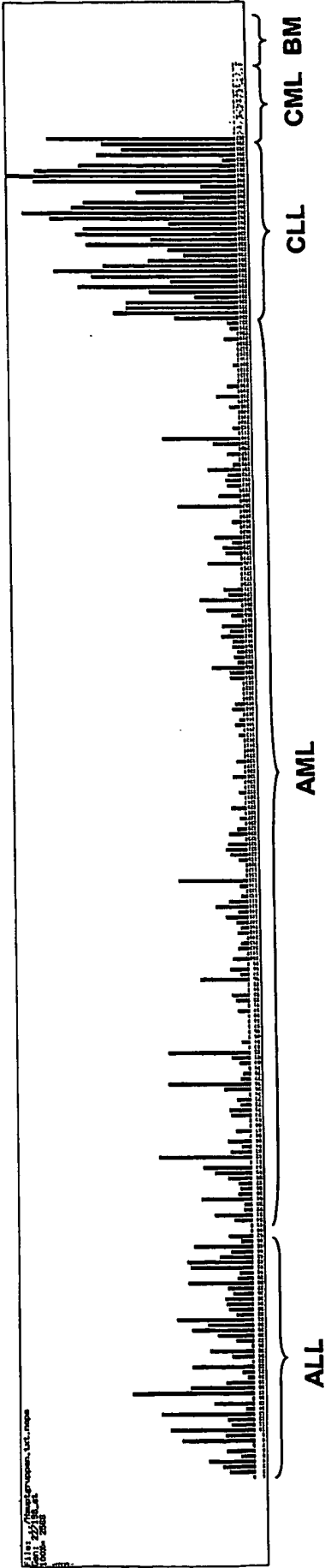


Figure 429

231241\_at, normal BM vs. all others

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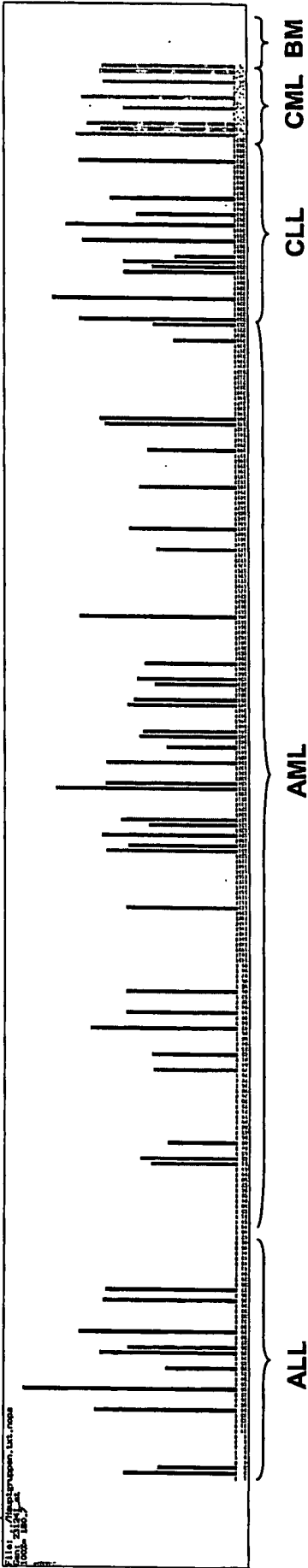


Figure 430

227497\_at, normal BM vs. all others

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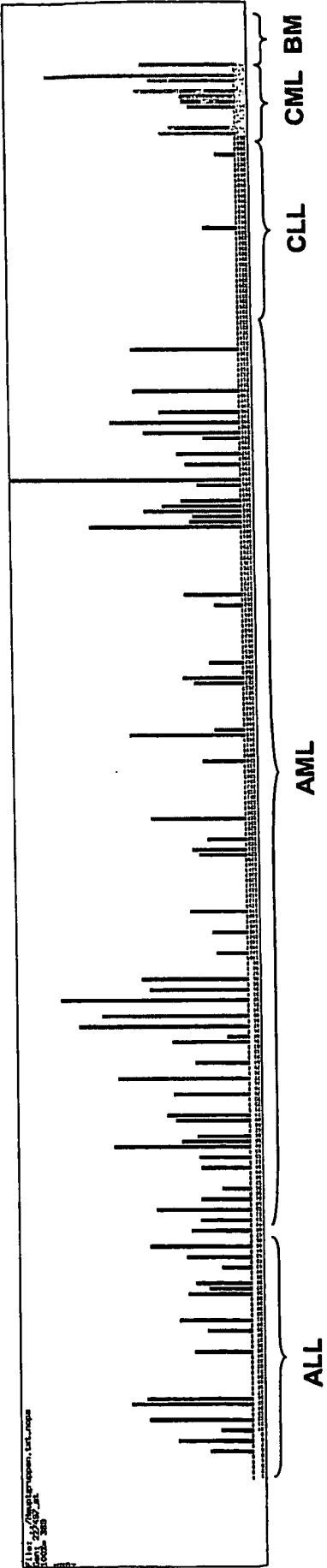
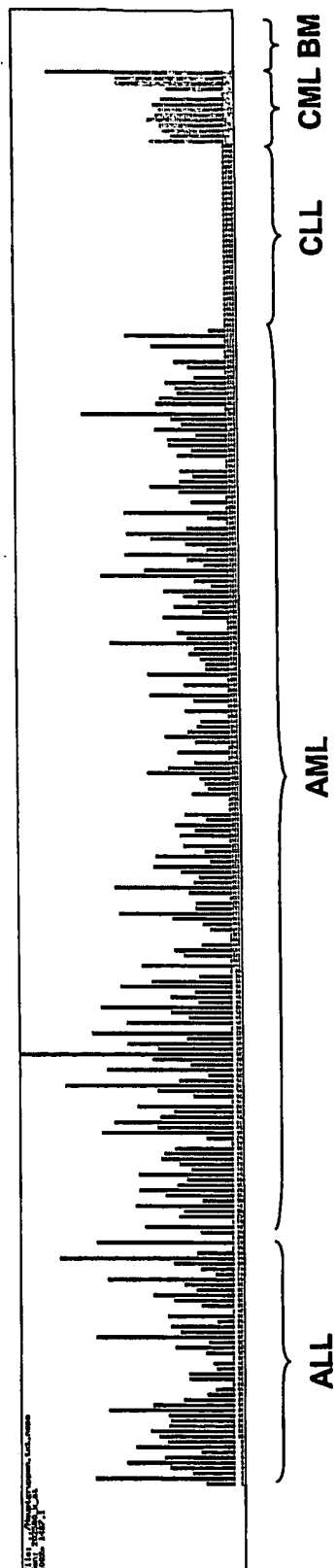


Figure 431

202580\_x\_at, FOXM1, CLL

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**Figure 432**

202709\_at, FMOD, CLL

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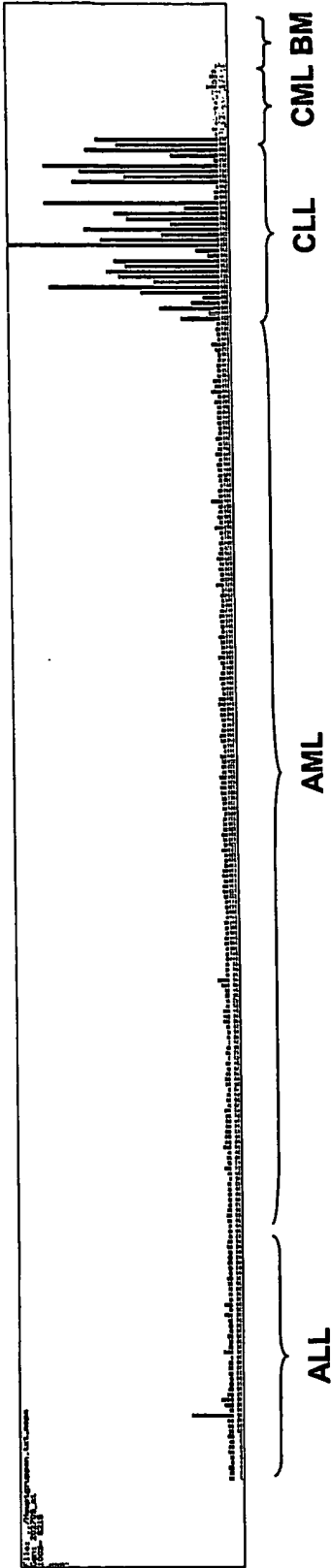


Figure 433

202503\_s\_at, KIAA0101, CLL

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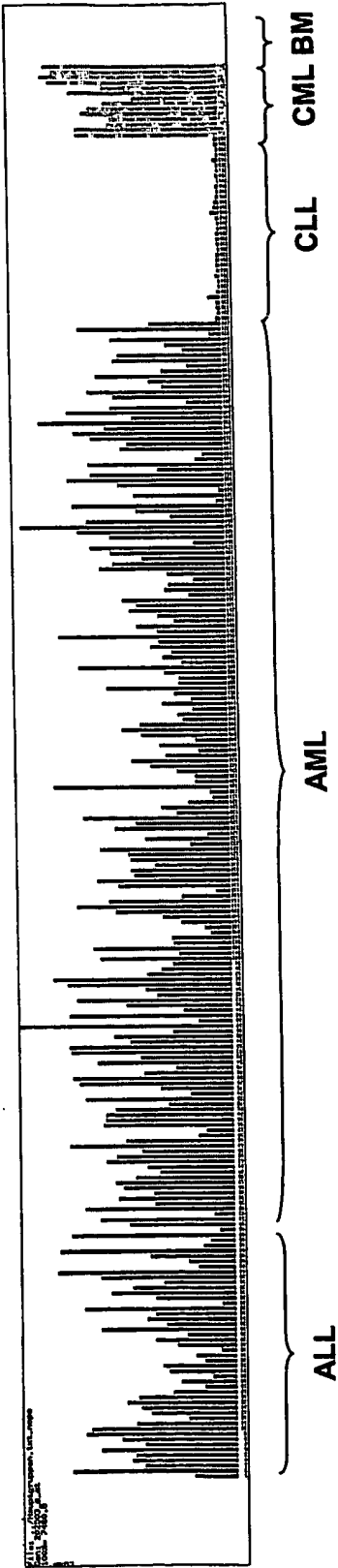


Figure 434



204882\_at, KIAA0053, CLL

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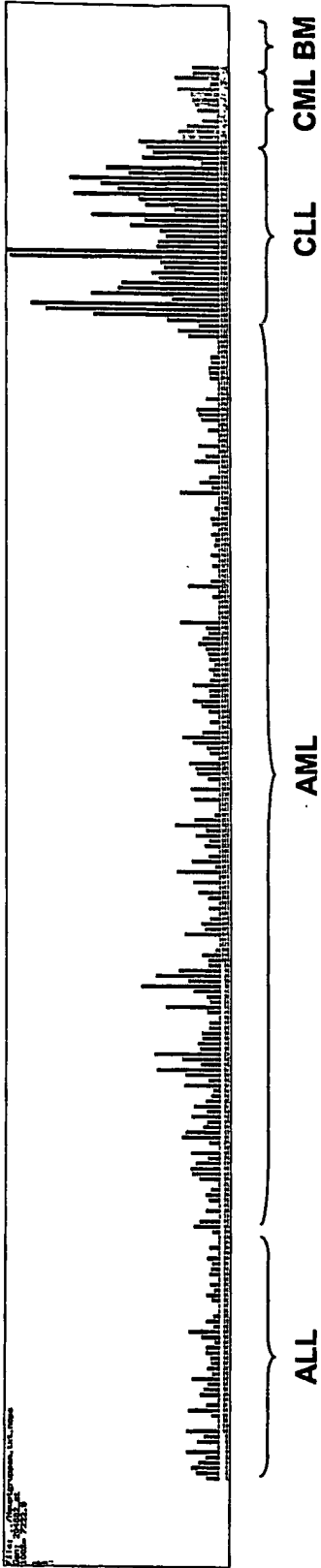


Figure 435

218090\_s\_at, CLL

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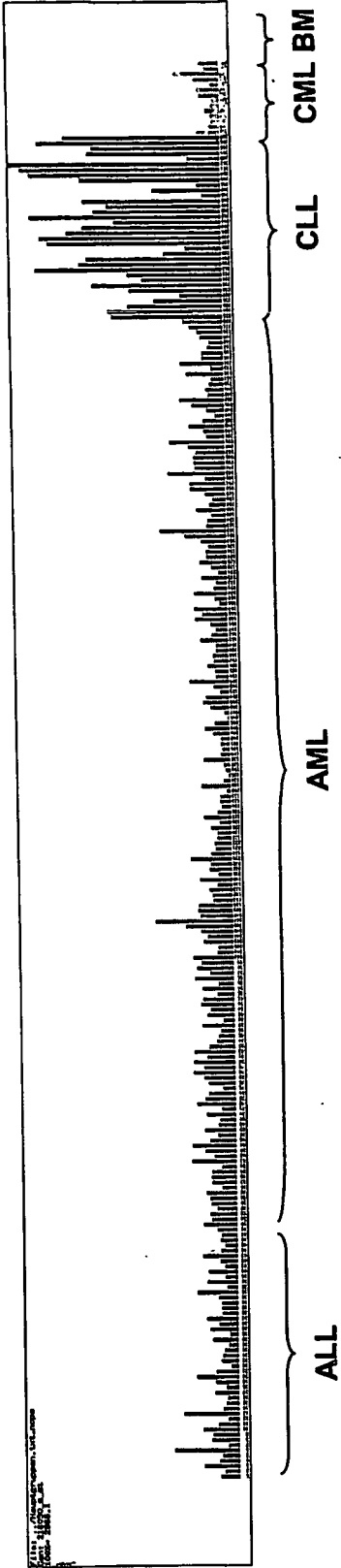


Figure 436

211352\_s\_at, NCOA3, CLL

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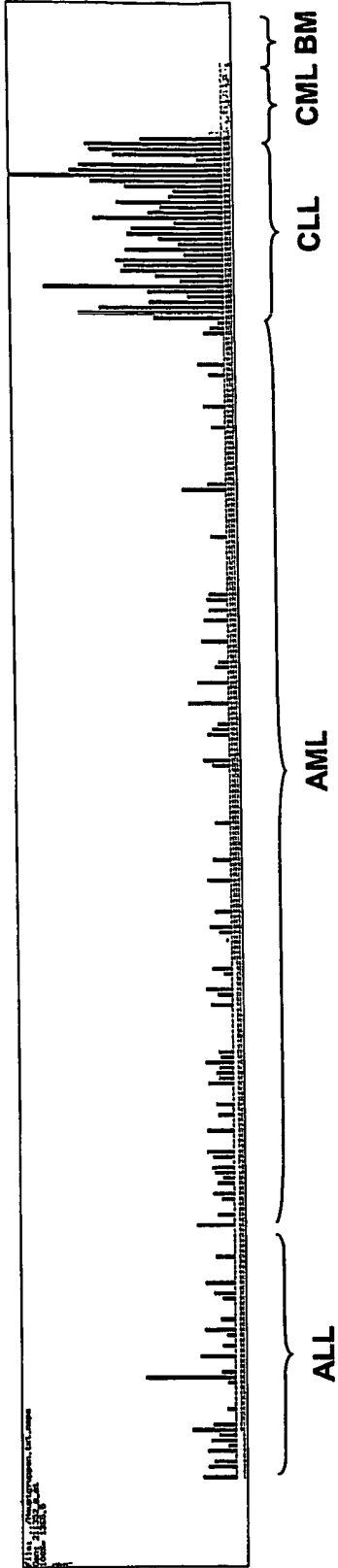


Figure 437

217950\_at, NOSIP, CLL

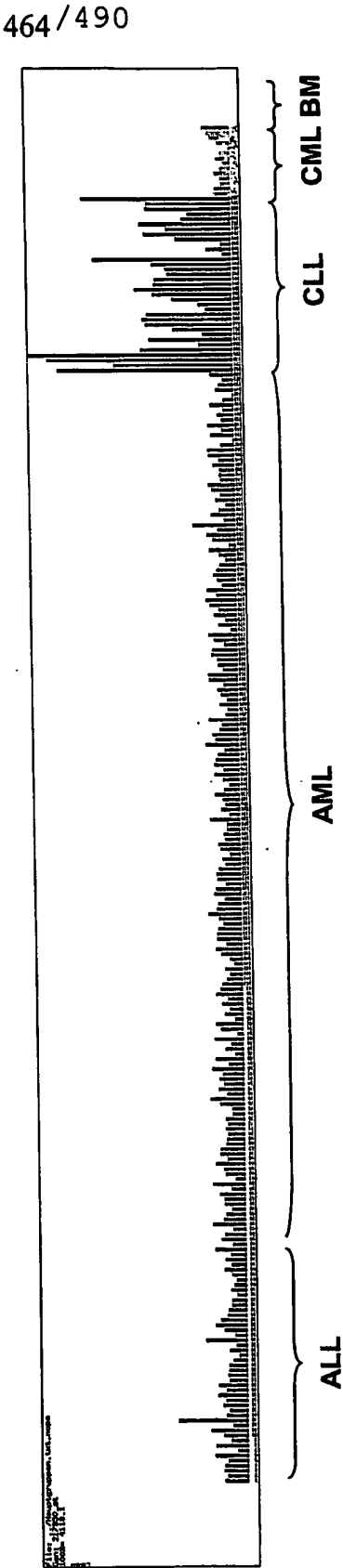


Figure 438

228471\_at, CLL

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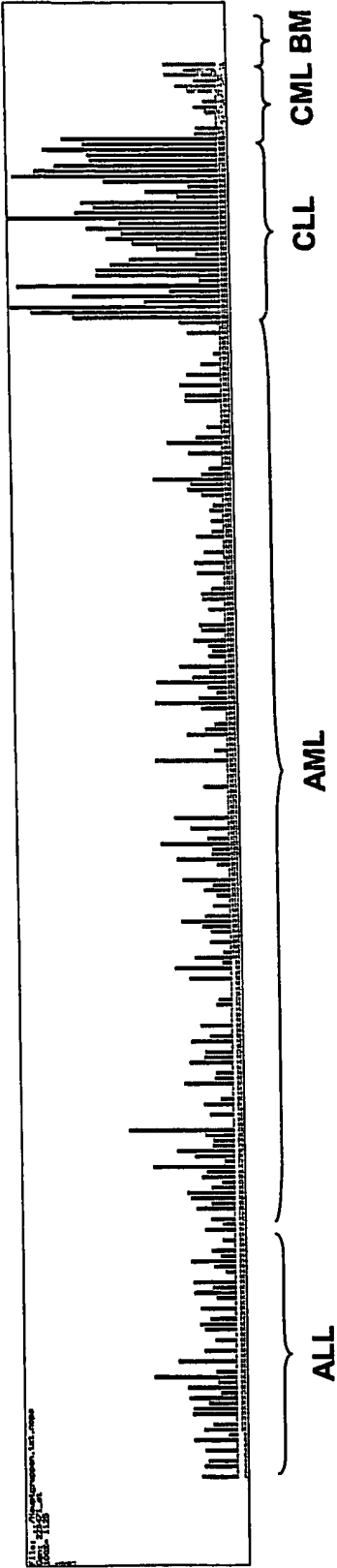


Figure 439

226147\_s\_at, CLL

466/490

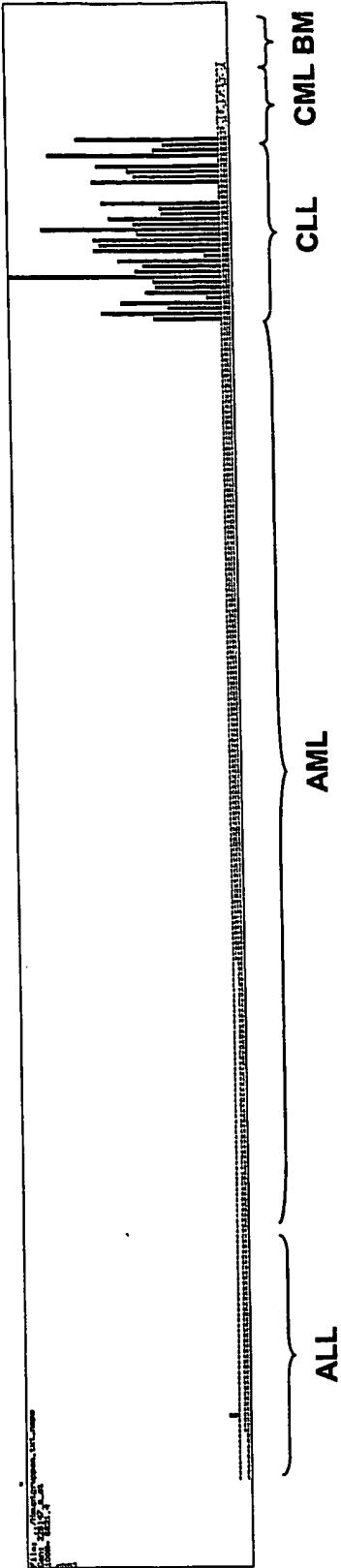


Figure 440

239287\_at, CLL

467/490

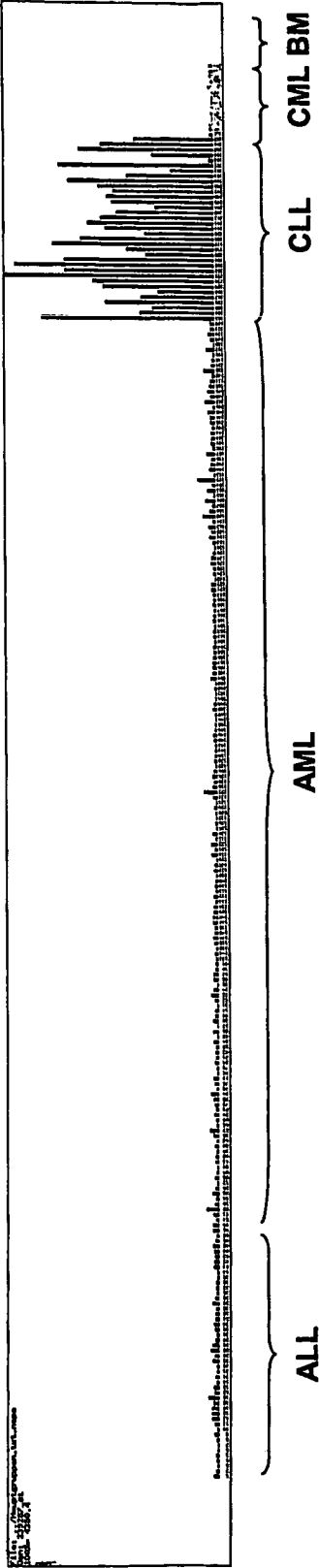


Figure 441

205051\_s\_at, KIT, AML

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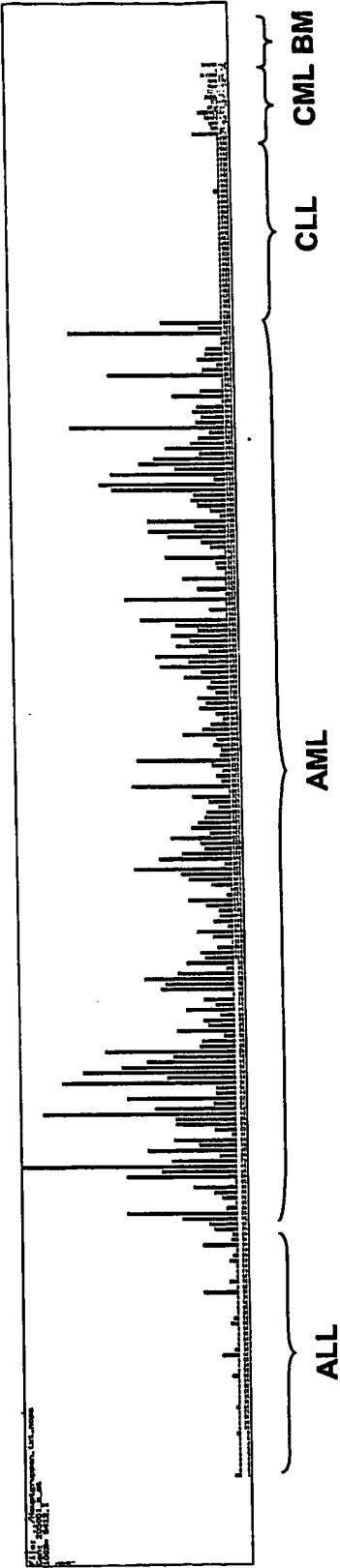


Figure 442



214761\_at, OAZ, ALL

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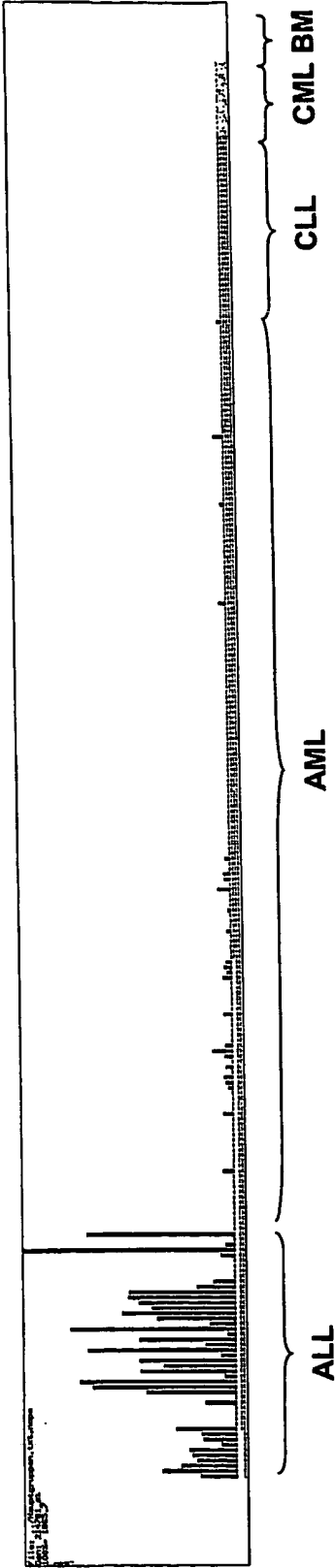


Figure 443

231854\_at, CML

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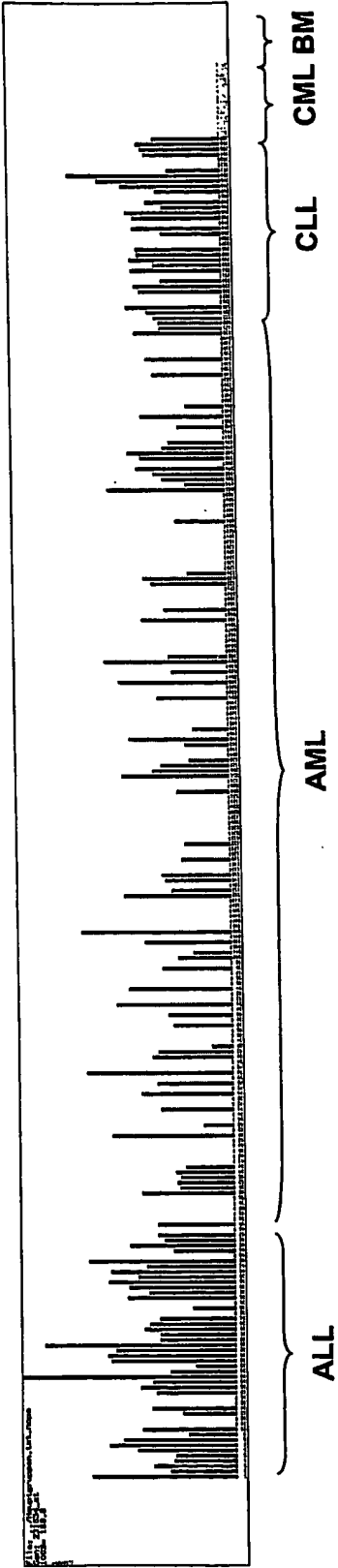


Figure 444

211404\_s\_at, APLP2, AML

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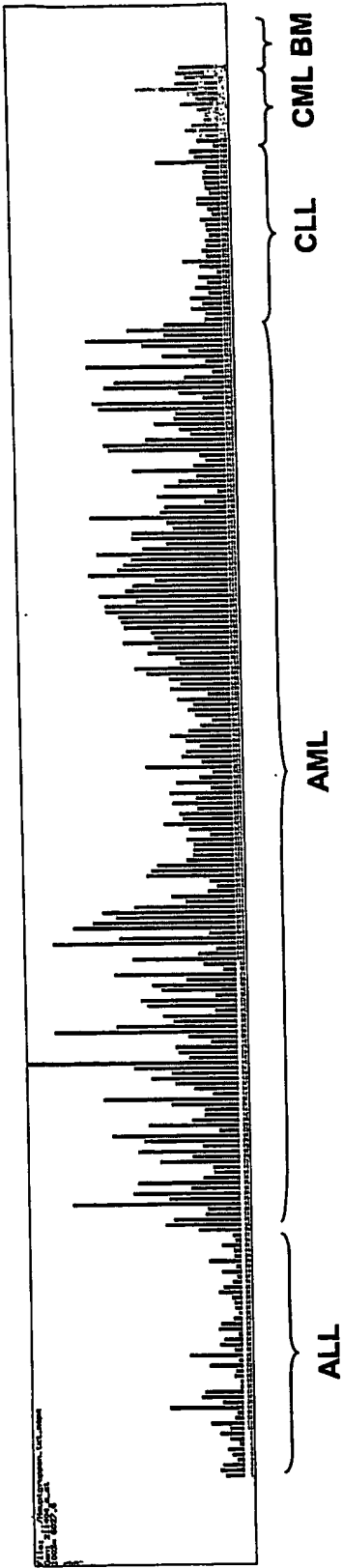


Figure 445

205382\_s\_at, DF, AML high

472/490

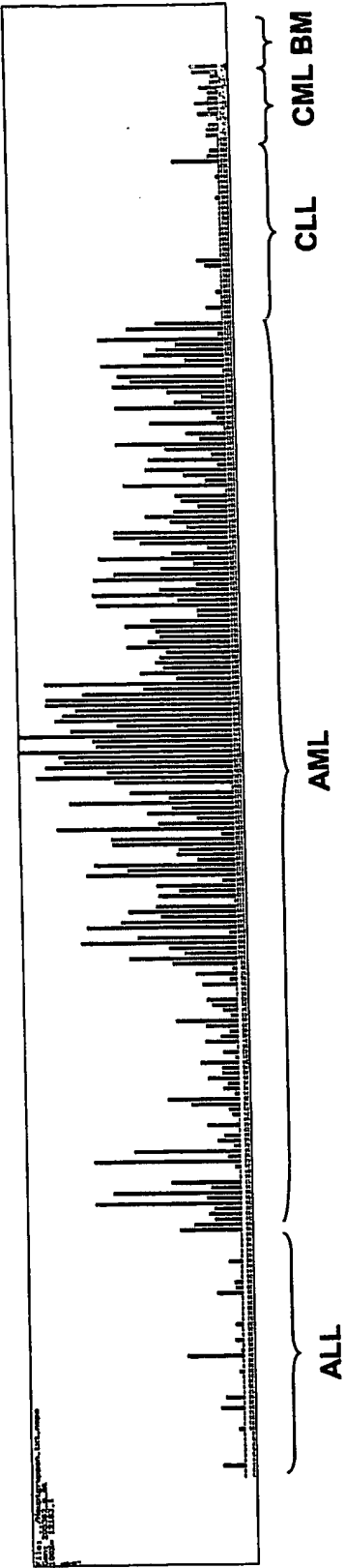


Figure 446

205599\_at, TRAF1, CML absent, CLL high

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Figure 447

210948\_s\_at, LEF1, lymphatic high

474/490

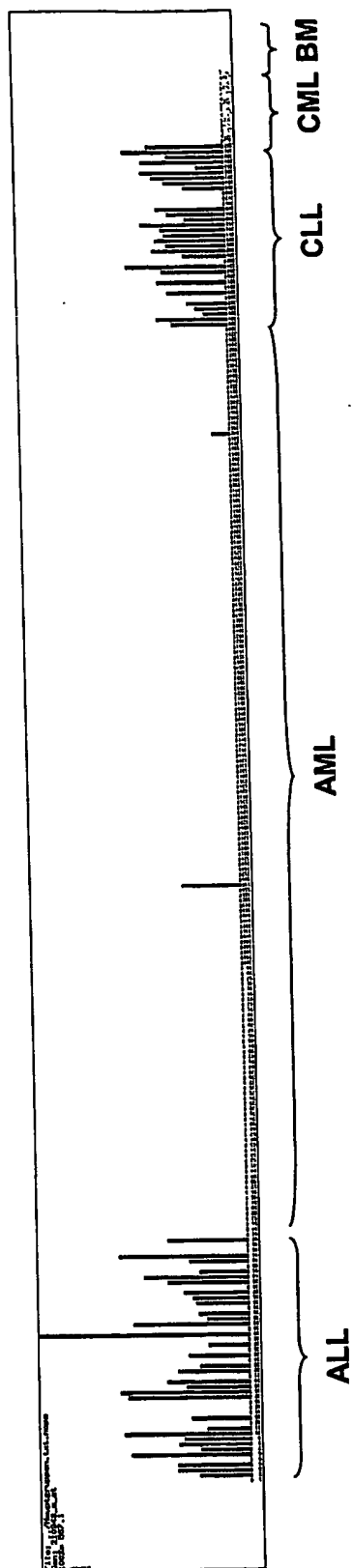


Figure 448

206398\_s\_at, CD19, lymphatic high

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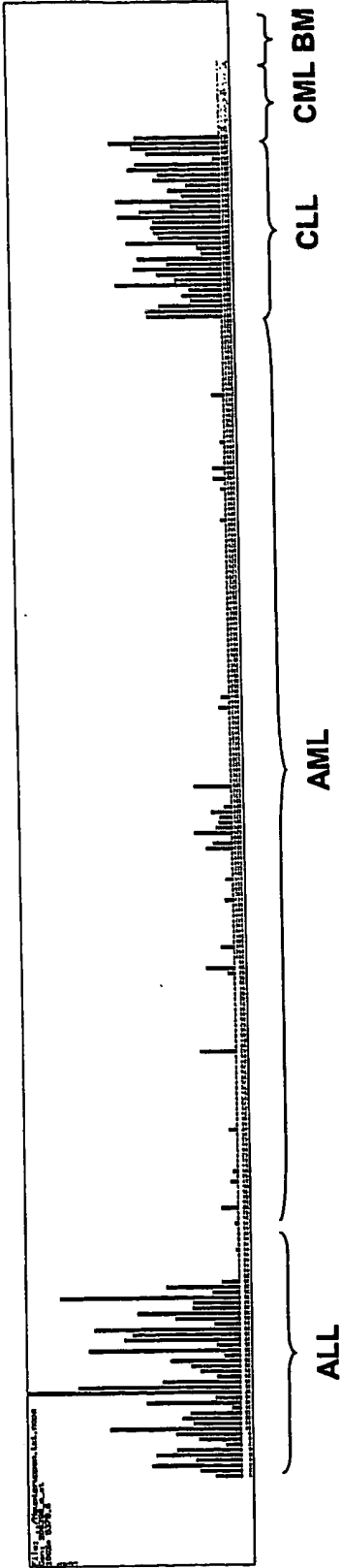


Figure 449

229487\_at, ALL high

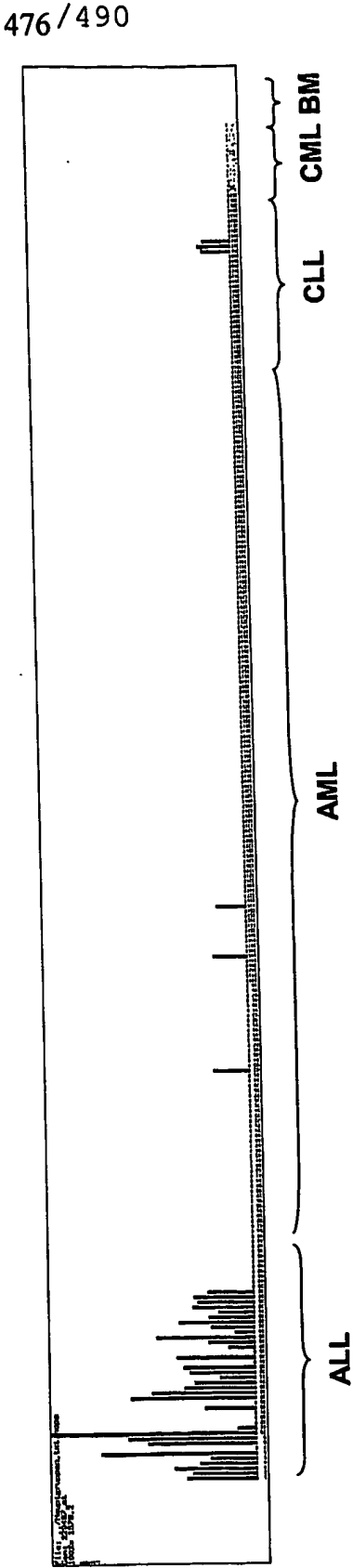


Figure 450



206255\_at, BLK, lymphatic high

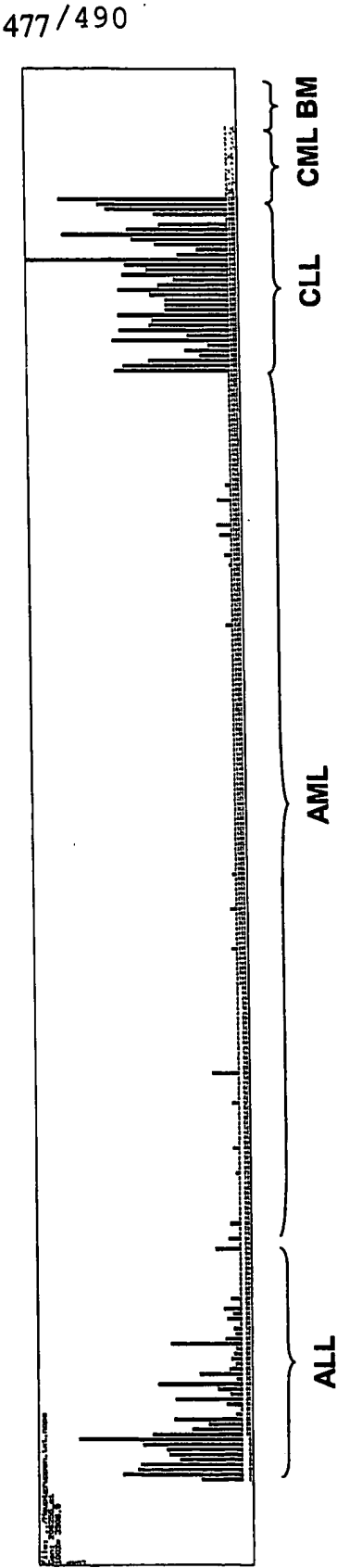


Figure 451

243362\_s\_at, LEF1, ALL high

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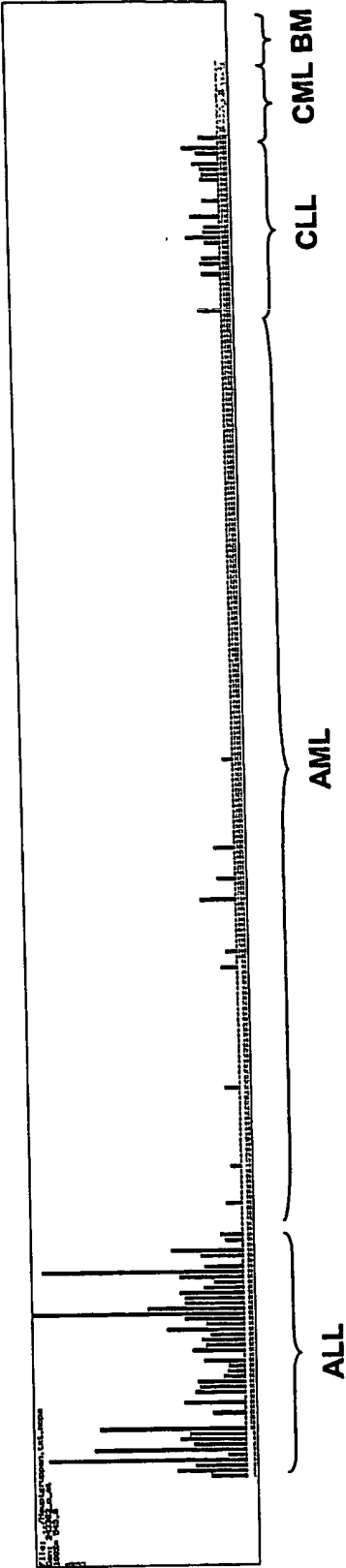


Figure 452

205049\_s\_at, CD79A, lymphatic high

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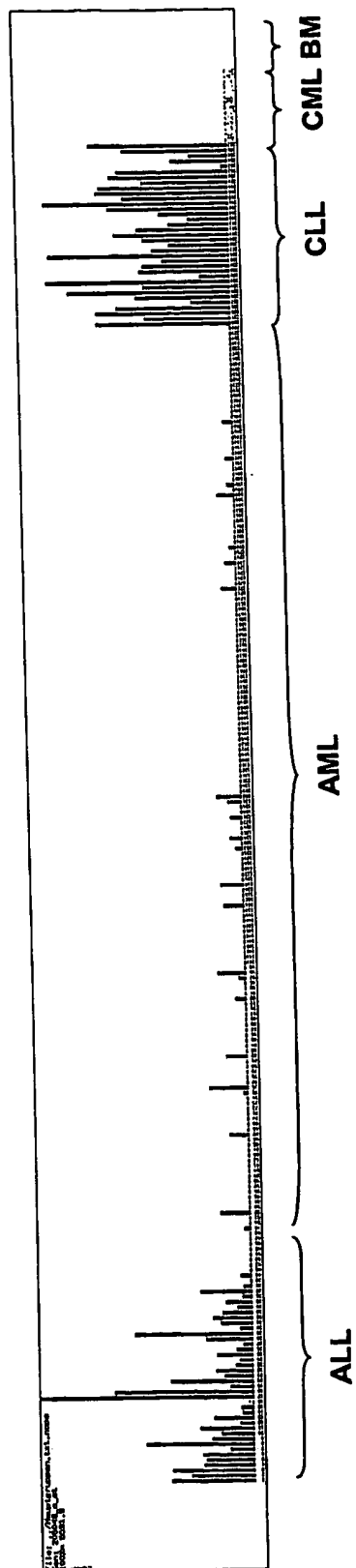


Figure 453

205382\_s\_at, DF, AML high

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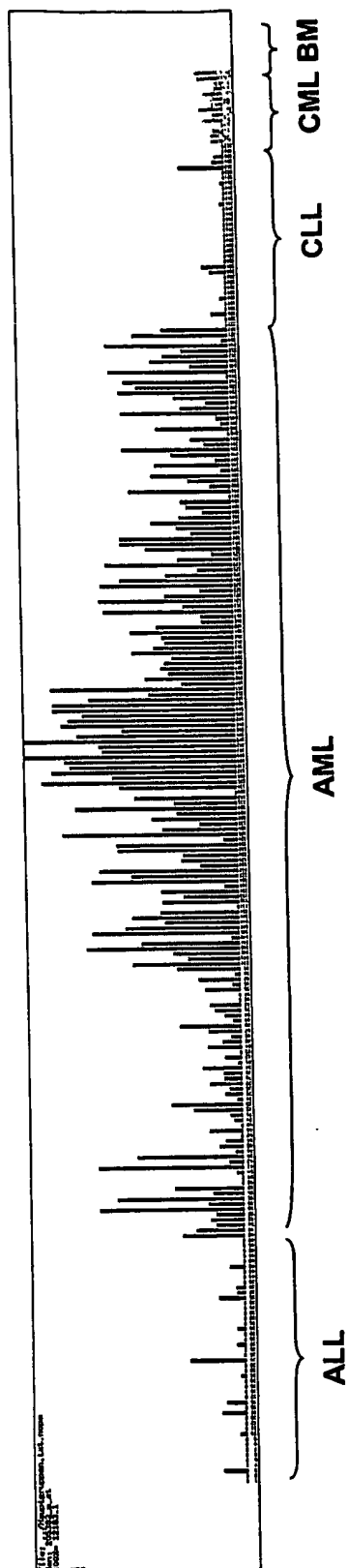


Figure 454

210487\_at, DNNTT, ALL high

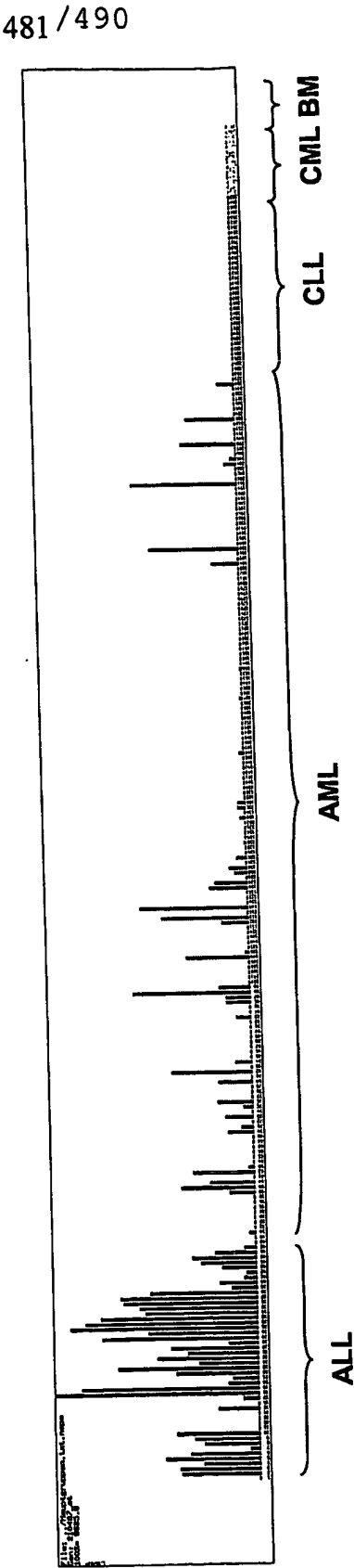


Figure 455

218516\_s\_at, FLJ20421, normal BM absent

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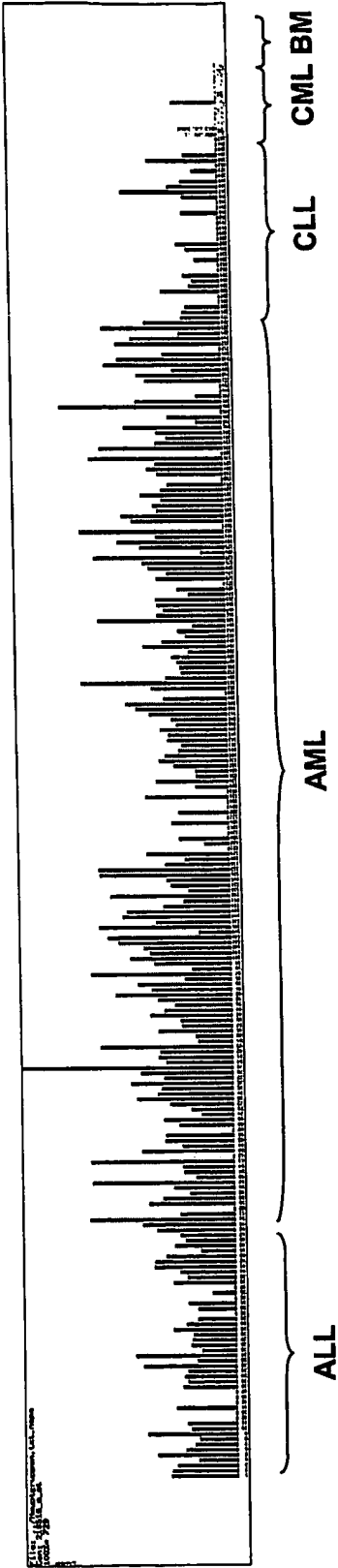


Figure 456

218916\_at, FLJ23436, normal BM absent

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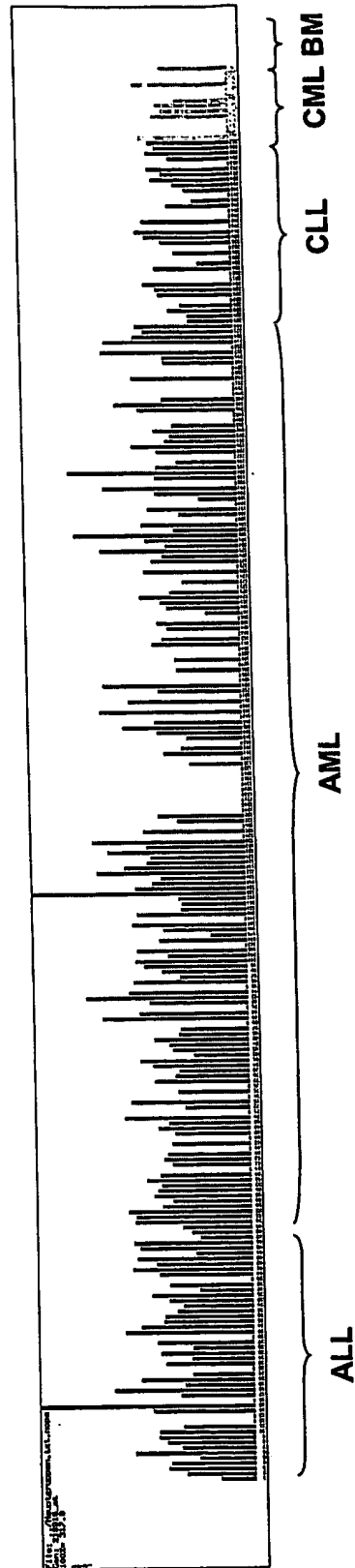


Figure 457

219753\_at, STAG3, ALL high

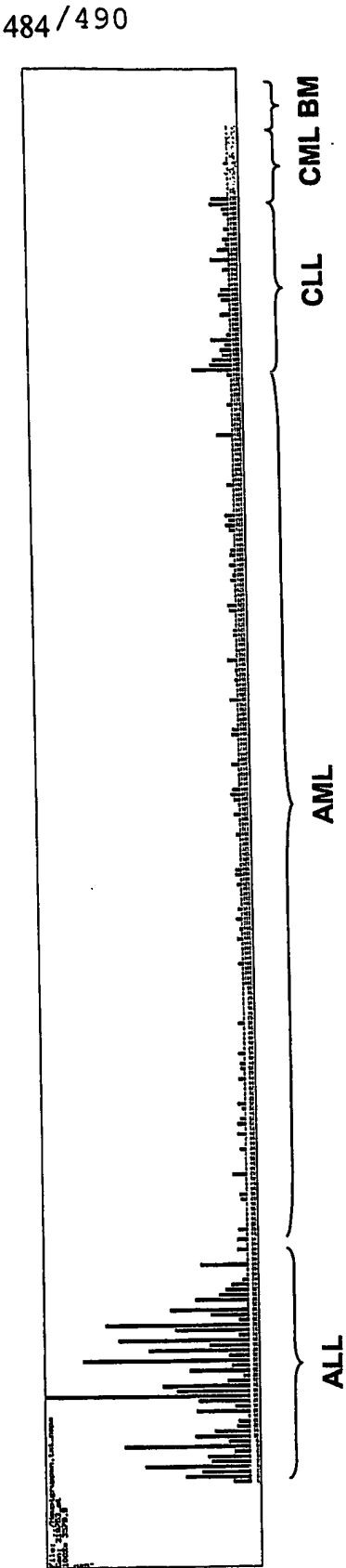


Figure 458



221969\_at, PAX5, lymphatic high

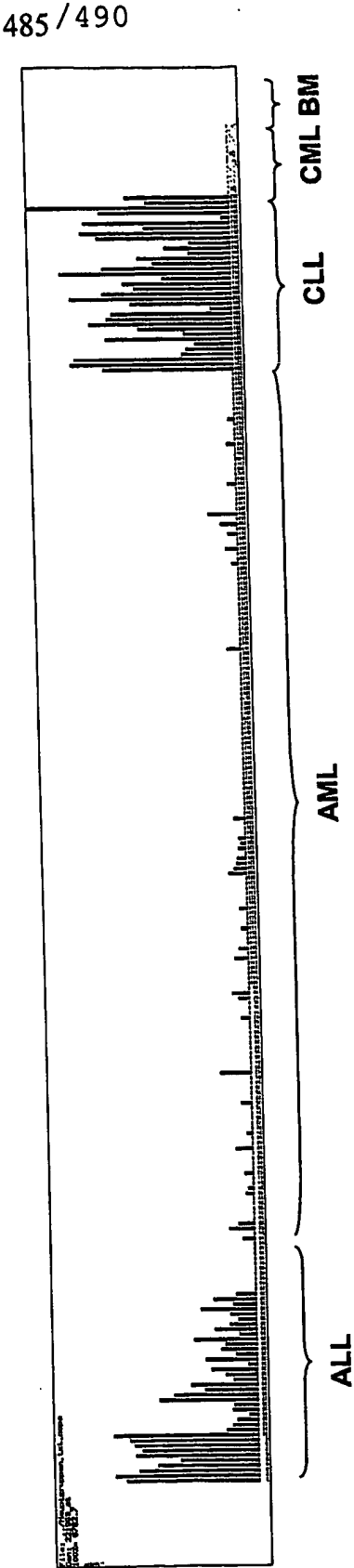


Figure 459

223703\_at, CDA017, myeloid and BM high

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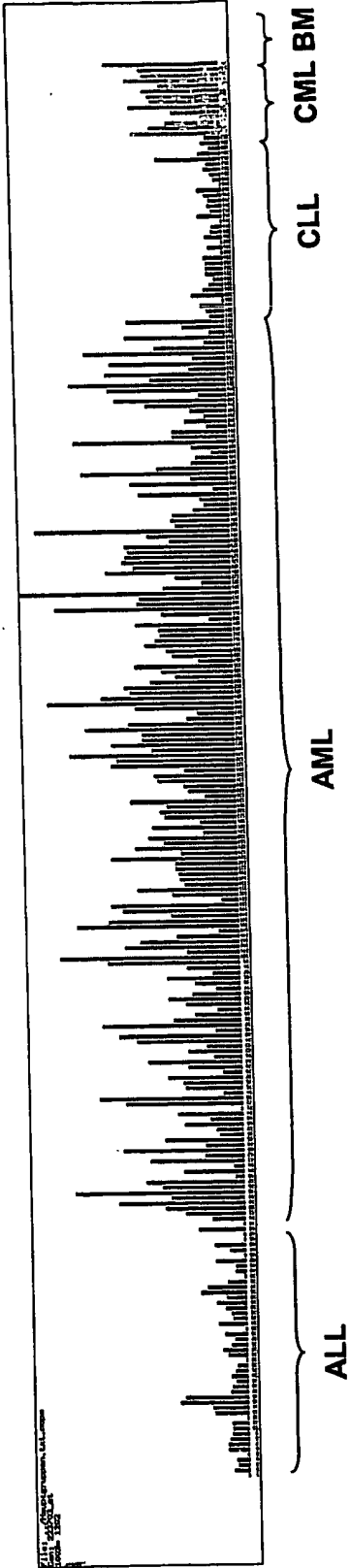


Figure 460

243363\_at, LEF1, lymphatic high

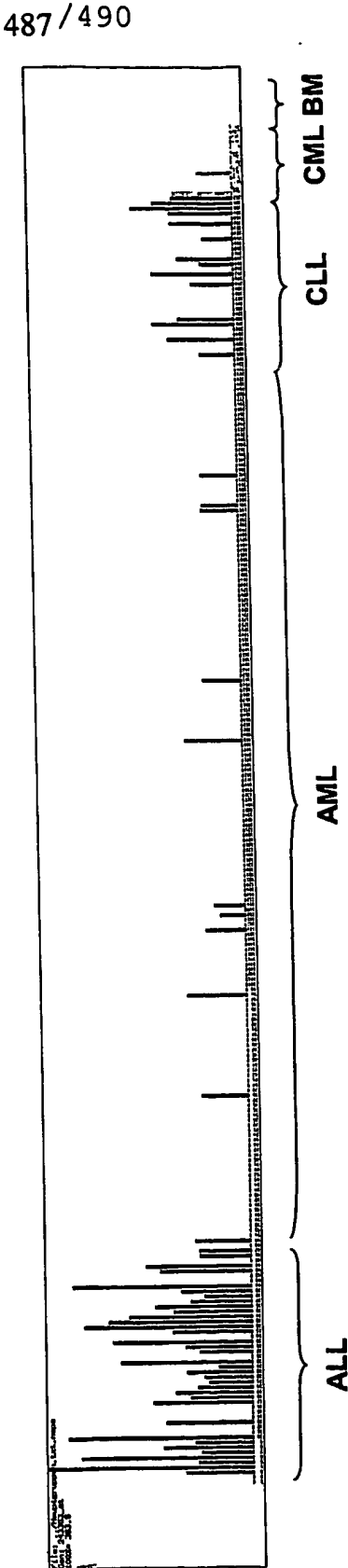


Figure 461

41577\_at, PPP1R16B, CML low

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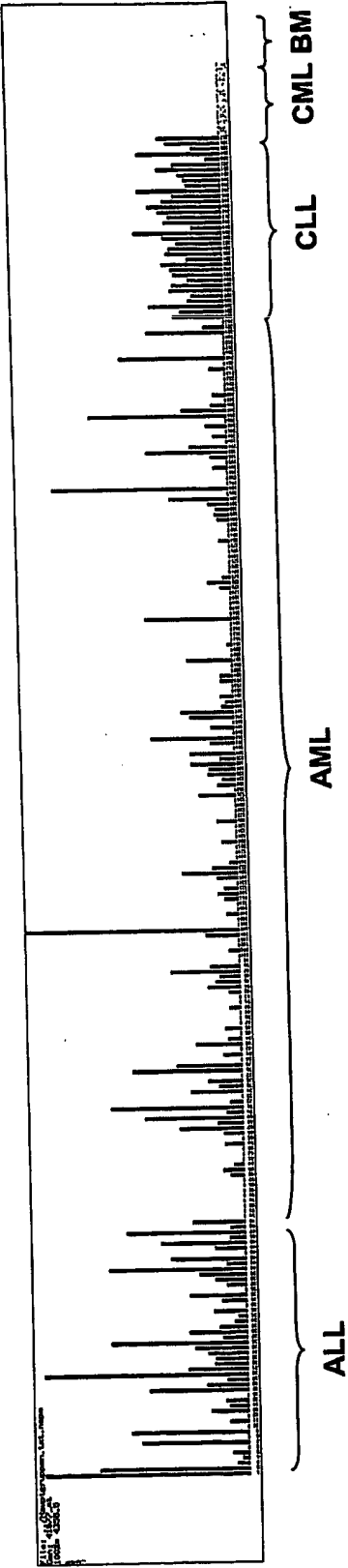


Figure 462

229790\_at, TERF2, CML, BM low

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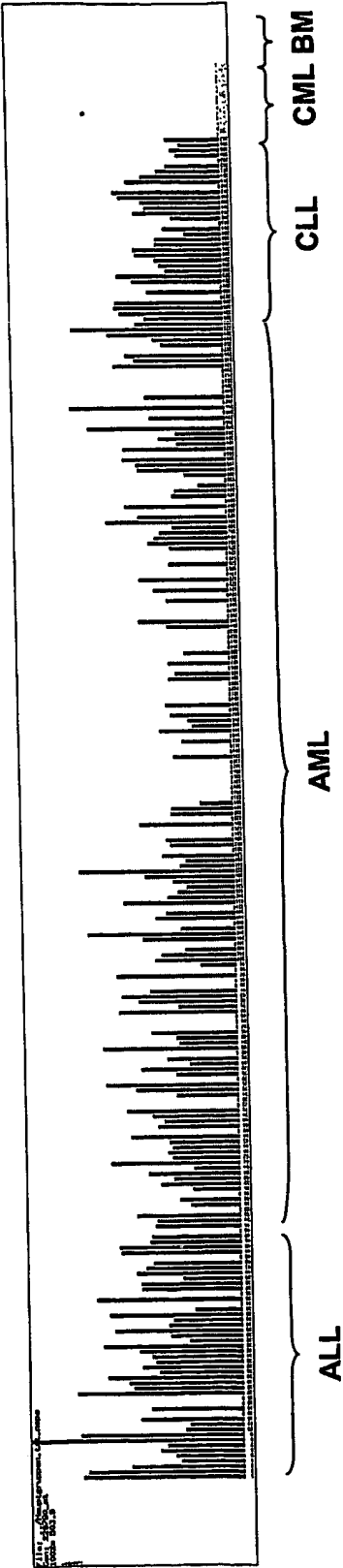


Figure 463

231736\_x\_at, MGST1, myeloid and BM high

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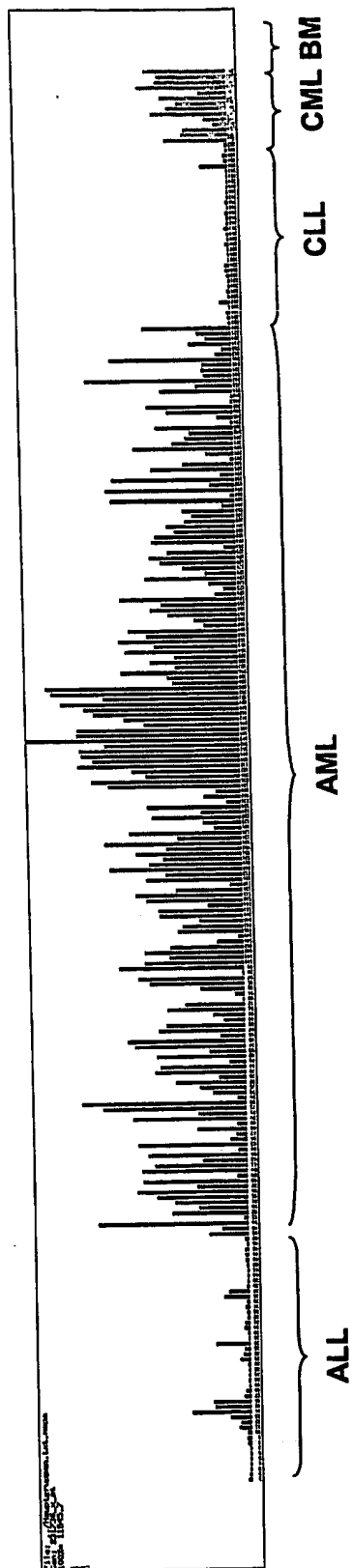


Figure 464

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 May 2003 (15.05.2003)

PCT

(10) International Publication Number  
**WO 2003/039443 A3**

(51) International Patent Classification<sup>7</sup>: **C12Q 1/68**

(21) International Application Number:  
PCT/EP2002/012303

(22) International Filing Date:  
4 November 2002 (04.11.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
01126244.1 5 November 2001 (05.11.2001) EP  
02009758.0 30 April 2002 (30.04.2002) EP

(71) Applicants (*for all designated States except US*):  
**DEUTSCHES KREBSFORSCHUNGSZENTRUM**  
[DE/DE]; Im Neuenheimer Feld 280, 69120 Heidelberg  
(DE). **LUDWIG-MAXIMILIANS -UNIVERSITÄT**  
[DE/DE]; Geschwister-Scholl-Platz 1, 80539 Munich  
(DE).

(71) Applicants and

(72) Inventors: **HAERLACH, Torsten** [DE/DE]; Springer-  
strasse 8, 81477 Munich (DE). **SCHOCH, Claudia**  
[DE/DE]; Springerstrasse 8, 81477 Munich (DE). **KERN,**  
**Wolfgang** [DE/DE]; Hanfelder Strasse 101, 82319 Starn-  
berg (DE).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **KOHLMANN,**  
**Alexander** [DE/DE]; Schwarzstrasse 14, 92318 Neu-  
markt (DE). **SCHNITTGER, Susanne** [DE/DE]; Saal-  
burgstrasse 2a, 81375 Munich (DE). **DUGAS, Martin**

[DE/DE]; Am Heidebruch 6, 81377 Munich (DE). **EILS,**  
**Roland** [DE/DE]; Strahlenberger Strasse 26, 69198  
Schriesheim (DE). **BRORS, Benedikt** [DE/DE]; Im  
Linsenhühl 42, 69221 Dossenheim (DE). **MERGEN-**  
**THALER, Susanne** [DE/DE]; Grubmühlerfeldstr. 19,  
82131 Gauting (DE).

(74) Agent: **VOSSIUS & PARTNER**; Siebertstrasse 4, 81675  
Munich (DE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
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SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK,  
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:  
19 August 2004

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*



WO 2003/039443 A3

(54) Title: NOVEL GENETIC MARKERS FOR LEUKEMIAS

(57) Abstract: The present invention is related to methods for detecting leukemia cells by determining the expression profile of a group of markers. In particular, the type or subtype of leukemia cells in a sample is determined. Further, uses of the group of markers is disclosed and compositions comprising these markers.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 02/12303

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE, BIOSIS, SCISEARCH, EMBASE, CHEM ABS Data, WPI Data, PAJ, Sequence Search

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>GOLUB T R ET AL: "Molecular classification of cancer: Class discovery and class prediction by gene expression monitoring"</p> <p>SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,, US, vol. 286, no. 5439, 15 October 1999 (1999-10-15), pages 531-537, XP002207658</p> <p>ISSN: 0036-8075</p> <p>cited in the application</p> <p>the whole document</p> <p style="text-align: center;">-/--</p>	<p>1-3, 9-11, 16-42, 44,45, 48,53-55</p>

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Date of the actual completion of the international search

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Date of mailing of the international search report

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3018

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Hagenmaier, S



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International Application No

PCT/EP 02/12303

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Y	<p>EP 1 043 676 A (WHITEHEAD BIOMEDICAL INST) 11 October 2000 (2000-10-11)</p> <p style="text-align: center;">-----</p> <p>the whole document</p>	<p>1-3, 9-11, 16-42, 44,45, 48,53-55</p>
Y	<p>ALIZADEH A A ET AL: "DISTINCT TYPES OF DIFFUSE LARGE B-CELL LYMPHOMA IDENTIFIED BY GENE EXPRESSION PROFILING" NATURE, MACMILLAN JOURNALS LTD. LONDON, GB, vol. 403, 3 February 2000 (2000-02-03), pages 503-512, XP002943414 ISSN: 0028-0836 the whole document</p> <p style="text-align: center;">-----</p>	<p>1-3, 9-11, 16-42, 44,45, 48,53-55</p>
Y	<p>ALIZADEH A ET AL: "THE LYMPHOCHIP: A SPECIALIZED CDNA MICROARRAY FOR THE GENOMIC-SCALE ANALYSIS OF GENE EXPRESSION IN NORMAL AND MALIGNANT LYMPHOCYTES" COLD SPRING HARBOR SYMPOSIA ON QUANTITATIVE BIOLOGY, BIOLOGICAL LABORATORY, COLD SPRING HARBOR, NY, US, vol. 64, no. 1, 1999, pages 71-78, XP001099007 ISSN: 0091-7451 the whole document</p> <p style="text-align: center;">-----</p>	<p>1-3, 9-11, 16-42, 44,45, 48,53-55</p>
Y	<p>VIRTANEVA K ET AL: "EXPRESSION PROFILING REVEALS FUNDAMENTAL BIOLOGICAL DIFFERENCES IN ACUTE MYELOID LEUKEMIA WITH ISOLATED TRISOMY 8 AND NORMAL CYTOGENETICS" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 98, no. 3, 30 January 2001 (2001-01-30), pages 1124-1129, XP002952627 ISSN: 0027-8424 the whole document</p> <p style="text-align: center;">-----</p>	<p>1-3, 9-11, 16-42, 44,45, 48,53-55</p>

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 02/12303

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 96/08508 A (GUDMUNDSSON GUDMUNDUR H ;BOMAN HANS G (SE); GUNNE HANS (SE); AGERB) 21 March 1996 (1996-03-21)  the whole document	1-3, 9-11, 16-42, 44,45, 48,53-55
Y	AGERBERTH B ET AL: "FALL-39, a putative human peptide antibiotic, is cysteine-free and expressed in bone marrow and testis." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. UNITED STATES 3 JAN 1995, vol. 92, no. 1, 3 January 1995 (1995-01-03), pages 195-199, XP002263224 ISSN: 0027-8424 the whole document	1-3, 9-11, 16-42, 44,45, 48,53-55
Y	NAGAOKA I ET AL: "Evaluation of the expression of human CAP18 gene during neutrophil maturation in the bone marrow." JOURNAL OF LEUKOCYTE BIOLOGY. UNITED STATES DEC 1998, vol. 64, no. 6, December 1998 (1998-12), pages 845-852, XP008025075 ISSN: 0741-5400 the whole document	1-3, 9-11, 16-42, 44,45, 48,53-55
A	MIYAZATO A ET AL: "IDENTIFICATION OF MYELODYSPLASTIC SYNDROME-SPECIFIC GENES BY DNA MICROARRAY ANALYSIS WITH PURIFIED HEMATOPOIETIC STEM CELL FRACTION" BLOOD, W.B.SAUNDERS COMPAGNY, ORLANDO, FL, US, vol. 98, no. 2, 15 July 2001 (2001-07-15), pages 422-427, XP002952629 ISSN: 0006-4971 the whole document	
A	ROSS D T ET AL: "SYSTEMATIC VARIATION IN GENE EXPRESSION PATTERNS IN HUMAN CANCER CELL CEL LINES" NATURE GENETICS, NATURE AMERICA, NEW YORK, US, vol. 24, March 2000 (2000-03), pages 227-235, XP002933374 ISSN: 1061-4036 the whole document	

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 02/12303

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SORLIE T ET AL: "Gene expression patterns of breast carcinomas distinguish tumor subclasses with clinical implications." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. UNITED STATES 11 SEP 2001, vol. 98, no. 19, 11 September 2001 (2001-09-11), pages 10869-10874, XP002215483 ISSN: 0027-8424 the whole document	
P,Y	----- SCHOCH CLAUDIA ET AL: "Acute myeloid leukemias with reciprocal rearrangements can be distinguished by specific gene expression profiles." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. UNITED STATES 23 JUL 2002, vol. 99, no. 15, 23 July 2002 (2002-07-23), pages 10008-10013, XP002215484 ISSN: 0027-8424 the whole document	1-3, 9-11, 16-42, 44,45, 48,53-55
P,Y	----- WO 02/24956 A (DANA FARBER CANCER INST INC ;RAMASWAMY SRIDHAR (US); WHITEHEAD BIO) 28 March 2002 (2002-03-28)  the whole document	1-3, 9-11, 16-42, 44,45, 48,53-55
P,Y	----- KOHLMANN A ET AL: "GENE EXPRESSION PROFILES OF DISTINCT AML SUBTYPES IN COMPARISON TO NORMAL BONE MARROW" BLOOD, W.B.SAUNDERS COMPAGNY, ORLANDO, FL, US, vol. 98, no. 11, PART 1, 16 November 2001 (2001-11-16), page 91A,AN380, XP001108980 ISSN: 0006-4971 the whole document	1-3, 9-11, 16-42, 44,45, 48,53-55
P,Y	----- DUGAS M ET AL: "A comprehensive leukemia database: integration of cytogenetics, molecular genetics and microarray data with clinical information, cytomorphology and immunophenotyping." LEUKEMIA: OFFICIAL JOURNAL OF THE LEUKEMIA SOCIETY OF AMERICA, LEUKEMIA RESEARCH FUND, U.K. ENGLAND DEC 2001, vol. 15, no. 12, December 2001 (2001-12), pages 1805-1810, XP002263731 ISSN: 0887-6924 the whole document	1-3, 9-11, 16-42, 44,45, 48,53-55
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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 02/12303

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,Y	<p>YEOH E-J ET AL: "Classification, subtype discovery, and prediction of outcome in pediatric acute lymphoblastic leukemia by gene expression profiling"  CANCER CELL, XX, US,  vol. 1, no. 2, March 2002 (2002-03), pages 133-143, XP002253604  ISSN: 1535-6108  the whole document</p>	<p>1-3,  9-11,  16-42,  44,45,  48,53-55</p>
P,Y	<p>-----  TAVOR SIGAL ET AL: "A model for C/EBPalpha-induced differentiation of BCR-ABL+ CML blast cells"  BLOOD,  vol. 98, no. 11 Part 1,  16 November 2001 (2001-11-16), page 143a,  XP002263225  43rd Annual Meeting of the American Society of Hematology, Part 1;Orlando, Florida, USA; December 07-11, 2001  ISSN: 0006-4971  the whole document</p>	<p>1-3,  9-11,  16-42,  44,45,  48,53-55</p>
P,A	<p>-----  DATABASE GENESEQ [Online]  EBI; 14 August 2002 (2002-08-14),  BEAZER-BARCLAY ET AL.: "HUMAN cDNA DIFFERENTIALLY EXPRESSED IN GRANULOCYTIC CELLS"  XP002263228  Database accession no. ABK84778  abstract</p>	
T	<p>-----  YANG YING-HUA ET AL: "Expression of LL-37/hCAP-18 gene in human leukemia cells."  LEUKEMIA RESEARCH,  vol. 27, no. 10, October 2003 (2003-10), pages 947-950, XP002263226  ISSN: 0145-2126 (ISSN print)  the whole document</p>	<p>1-3,  9-11,  16-42,  44,45,  48,53-55</p>
T	<p>-----  HAERLACH TORSTEN ET AL: "The Diagnosis of 14 Specific Subtypes of Leukemia Is Possible Based on Gene Expression Profiles: A Study on 263 Patients with AML, ALL, CML, or CLL."  BLOOD,  vol. 100, no. 11,  16 November 2002 (2002-11-16), page Abstract No. 523, XP002263227  44th Annual Meeting of the American Society of Hematology;Philadelphia, PA, USA; December 06-10, 2002  ISSN: 0006-4971  the whole document</p> <p style="text-align: center;">-----  -/--</p>	<p>1-3,  9-11,  16-42,  44,45,  48,53-55</p>

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 02/12303

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	<p>KOHLMANN ALEXANDER ET AL: "Molecular characterization of acute leukemias by use of microarray technology."  GENES, CHROMOSOMES &amp; CANCER. UNITED STATES  AUG 2003,  vol. 37, no. 4, August 2003 (2003-08),  pages 396-405, XP008025253  ISSN: 1045-2257  the whole document  -----</p>	<p>1-3,  9-11,  16-42,  44,45,  48,53-55</p>

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 02/12303

### Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-3, 9-11, 16-42, 44, 45, 48, 53-55 (all partially)  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-3, 9-11, 16-42, 44, 45, 48, 53-55 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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Continuation of Box I.2

Claims Nos.: 1-3, 9-11,16-42,44,45,48,53-55 (all partially)

Claims 1-3, 9-11,16-42,44,45,48,53-55 are directed to methods, kits and compositions which relate to an extremely large number of possible marker groups comprising the CAMP marker. In fact, the claims contain so many possible permutations that a lack of conciseness within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been limited to methods, kits and compositions relating to CAMP as such.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3, 9-11,16-42,44,45,48,53-55 (all partially)

Invention 1:

Methods relating to diagnosis and therapy of leukemia comprising determining the expression profile of a group of markers in a patient sample characterized in that one marker is CAMP; kit comprising a reagent for assessing the expression profile of CAMP; protein or mRNA, cDNA or cRNA corresponding to CAMP for the treatment of leukemia; a composition comprising a group of markers and substances chemically different to the markers characterized in that the group of markers comprise CAMP.

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2. claims: 1-55 (all partially)

Inventions 2-3309:

Methods relating to diagnosis and therapy of leukemia comprising determining the expression profile of a group of markers in a patient sample characterized in that one marker is SYNE-1B; kit comprising a reagent for assessing the expression profile of SYNE-1B; protein or mRNA, cDNA or cRNA corresponding to SYNE-1B for the treatment of leukemia; a composition comprising a group of markers and substances chemically different to the markers characterized in that the group of markers comprise SYNE-1B.

..ibidem for each marker listed in tables  
1-20,25-27,29,30,32,33,35,36,38,39,41,42

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 02/12303

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1043676	A	11-10-2000	CA 2304876 A1	09-10-2000
			EP 1043676 A2	11-10-2000
			JP 2001017171 A	23-01-2001
			US 2003017481 A1	23-01-2003
			US 6647341 B1	11-11-2003
			US 2003073083 A1	17-04-2003
-----				
WO 9608508	A	21-03-1996	AU 3536895 A	29-03-1996
			SE 9403055 A	14-03-1996
			WO 9608508 A1	21-03-1996
-----				
WO 0224956	A	28-03-2002	AU 9280201 A	02-04-2002
			EP 1339872 A2	03-09-2003
			WO 0224956 A2	28-03-2002
			US 2002110820 A1	15-08-2002
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